# GUNS IN AMERICA



Results of a Comprehensive National Survey on Firearms Ownership and Use



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## Results of a Comprehensive National Survey on Firearms Ownership and Use

Summary Report

Philip J. Cook Jens Ludwig



The Police Foundation is a privately funded, independent, nonprofit organization established by The Ford Foundation in 1970 and dedicated to supporting innovation and improvement in policing. The Police Foundation's research findings are published as an information service.

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This is a summary report of The National Survey of Private Ownership of Firearms in the United States. The full technical report is available from the Police Foundation, 1001 22nd Street, N.W., Washington, D.C. 20037, telephone (202) 833-1460.

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# Foreword

The reality of policing in America includes dealing with citizens who possess firearms: there are about 200 million guns in private hands, according to this survey and others. So huge is the domestic arsenal that American police must be aware that a firearm may be at hand in any situation they encounter. Tragically, in thousands of situations each year, the potential for injury or death by firearms is realized.

The National Survey of Private Ownership of Firearms in the United States (NSPOF) provides the most comprehensive information to-date on America's private stock of firearms. Topics covered in the NSPOF include: the size, composition, and ownership of the gun stock; how and why firearms are acquired; gun storage and carrying; the defensive use of firearms

against criminal attackers; and attitudes toward gun control regulation.

Among other things, the survey found that handgun owners most often gave self-protection as their primary reason for gun ownership, whereas owners of long guns cited hunting or target shooting as their main reason for owning a gun. Furthermore, handguns are much more likely than long guns to be carried in public, and to be kept unlocked and loaded in households.

While there are enough guns in private hands to provide every adult in America with one, only 25 percent actually own one and those who do usually own several. Middle-aged, college-educated residents of rural areas and small towns are most likely to own guns, according to this survey.

By the year 2003, according to the Centers for Disease Control (CDC), the leading cause of death by injury in the U.S. will be from gunshots. The prevalence of firearm ownership and use is of concern to law enforcement personnel, health officials, educators, policymakers, families, and communities all across America. The impact that guns have on our lives continues to generate passionate debate. Americans are ambivalent about guns: they fear them and at the same time they feel safer possessing them, as reflected by the growing number of states that have or are considering concealed weapons-"right-tocarry"—laws.

For the nation's police, the nexus of drugs and guns creates daily and deadly challenges to their ability to control crime and ensure public safety. Civil debate and rational policy about guns require that we arm ourselves with the facts about the extent and nature of gun ownership and use in America. As with all of the work which the Police Foundation has conducted for over a quarter century, the results of The National Survey of Private Ownership of Firearms presented in this report are an effort toward informing the debate.

Hubert Williams President February 1997

# Introduction

The United States is unique among wealthy nations in its vast private arsenal of firearms. The 200 million guns in private hands provide a sense of security for many of their owners. Yet they also make a lethal contribution to another uniquely lavish feature of American life, criminal violence. In the debate over the proper regulation of gun commerce and use, it is concern about crime that holds center stage. One side touts guns as an important deterrent and source of protection; the other denounces them for the damage they do. It is clear that America's vast stock of firearms has impact on our lives in a variety of ways and that it behooves us to learn what we can about it.

The 1994 National Survey of the Private Ownership of Firearms (NSPOF) was designed and implemented with

these concerns in mind. This nationally representative telephone survey was conducted by Chilton Research Services during November and December 1994 for the Police Foundation under the sponsorship of the National Institute of Justice (NIJ). It consisted of telephone interviews with a probability sample of over 2,500 adults, who were asked questions about gun ownership, training, transactions, uses, and related attitudes. To an extent the NSPOF visits familiar territory, well mapped by previous surveys; this redundancy helps provide a check on its validity. But the NSPOF surpasses other surveys in its comprehensiveness. As a result, we now have a statistical description of the private gun stock by size, caliber, value, how the firearms were obtained, and when and how they are stored and used.

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...bandgun ownership follows pretty much the same pattern as long gun ownership despite the weapons' very different uses: bandguns are predominantly kept for selfdefense, and long guns for sport.

The NSPOF does less well in providing reliable information on two vital events involving guns: defense against crime and accidental wounding. Both of these are rare occurrences, at least proportionately, but figure prominently in the public debate over the costs and benefits of gun ownership. As we shall discuss in this report, the estimated incidence of these occurrences from this and similar surveys is subject to a large positive bias and should not be taken seriously.

This summary report is presented in chapters, beginning with an assessment of the quality of the survey. The NSPOF was conducted in a fashion that meets the norms for an academic-quality, random-digit-dial telephone survey. Initially we were concerned that the NSPOFbased estimate of household gun prevalence was just 35 percent, when the conventional wisdom suggests that something closer to 50 percent is correct. But the conventional wisdom may be out of date; our estimate is not far out of line with other recent surveys. And the NSPOF estimate of 192 million guns in private hands is close to other careful estimates. In our investigation, a new version of the gender gap became evident: married women are considerably less likely to report a gun in the household than married men. Apparently, wives are either ignorant of the firearms' presence or uncomfortable in discussing them. We solved this problem by restricting most of our analysis to the data on self-ownership.

Chapter 3 presents results that are unique to the NSPOF. Thanks to detailed inquir-

ies about each respondent's gun collection, this survey provides the basis for a detailed portrait of the U.S. gun stock. This report includes information not just on the types of guns, but also on how they were acquired. Previous speculation on the importance of the "secondary" market in gun transactions may have been exaggerated; we find that a majority of transactions involve federally licensed dealers. Our analysis of how guns are stored documents an all-too-prevalent practice of keeping at least one gun loaded and unlocked. Strangely, training does not appear to promote safer storage. However, when we disaggregate formal training by source we find that some training programs (such as those offered by the National Safety Council) are effective in reducing the prevalence of unsafe storage practices.

Chapter 4 switches focus from the guns to their owners, documenting the patterns and motivations for gun ownership. The most evident division is between the sexes: men own most of the guns. About two-thirds of adult men have owned a gun at some time in their lives, and over 40 percent do so currently. The corresponding numbers for women are far smaller. In other respects as well, gun ownership follows patterns of military service and rural sporting traditions. One interesting feature is that handgun ownership follows pretty much the same pattern as long gun ownership despite the weapons' very different uses: handguns are predominantly kept for self-defense, and long guns for sport. The women who do own guns are far more likely than male owners to report protection as their primary motive. Adults who have been arrested for nontraffic offenses are more likely to own firearms than others.

Chapter 5 analyzes the uses of guns, beginning with the extent to which the public (gun owning or not) has been trained in the proper handling of guns. The primary sporting uses of guns are hunting and target shooting, with about 15 million people involved in each. We estimate that 4 million people carry guns for protection on the job and another 10 million people carry guns, at least occasionally, for protection outside of their work. All of this activity produces some accidental shootings, but so rarely as to preclude accurate estimation in this type of survey.

The dangers of relying upon telephone surveys to estimate rare events are also highlighted in our attempts to estimate the number of defensive gun uses (DGUs), reported at some length in chapter 6 The NSPOF data offer the first opportunity to replicate the recent well-publicized survey finding that 2.5 million citizens use a gun defensively each year. Since many defensive gun uses may go unreported to law enforcement, these estimates cannot be verified by official records.

However, the DGU estimate from the NSPOF—which is not inconsistent with the 2.5 million figure—can be compared to well-known facts about the number of firearms injuries, homicides, and vio-

lent crimes in the United States. These comparisons reveal gross inconsistencies. The fundamental problem here is inherent to the task of estimating a rare event; false positives tend to outnumber false negatives, producing a positive bias. Consistent with this explanation, a substantial proportion of the defensive gun use reports are in some way internally inconsistent, or otherwise don't make sense. We also note that respondents' descriptions of their "defensive" gun uses do not allow us to properly determine whether the incident, if accurately reported, was legal or appropriate, nor can we determine the respondent's culpability, if any, in the incident.

Finally, in chapter 7 we explore the views of the respondents with respect to handgun regulation. As has been the case since pollsters started asking the question, the great majority of the American public would like to see somewhat more stringent controls on gun commerce and use than currently exist in most jurisdictions. On the other hand, only a minority is willing to express support for actually banning handgun possession. The gender gap is again much in evidence on these matters and so is the respondents' concern about crime.

This collection of findings does not add up to any specific conclusion about appropriate regulation of guns, but policy concerns influence our choice of topics throughout. The result, we hope, is better understanding of the causes and consequences of America's extensive involvement with guns. ...the
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## II

# **M**ETHODOLOGY

### Introduction

The NSPOF is a nationally representative telephone survey. The methods employed by Chilton generally follow the norms of good practice for telephone surveys (Frey 1989). The main cause for concern is the low response rate—more than 40 percent of the contacts with "eligible" telephone numbers could not be completed, or resulted in a refusal. Hence the completed sample may be somewhat unrepresentative of the U.S. population. However, for better or worse this response rate is not *unusually* low for surveys of this sort.

## **Survey Method**

The NSPOF employs a list-assisted random-digit-dial sampling method, as discussed in Brick et al. (1995). Households with unlisted telephone numbers

are eligible under this method, and each telephone household in the U.S. essentially has equal likelihood of being selected. Each selected household was scheduled for an original call and up to five follow-ups (Chilton 1995, 2-4). When a call was completed, the Chilton interviewer asked to speak with the adult in the household who had the most recent birthday. Since this method randomizes the choice of respondent from the adults living in the household, the NSPOF is able to produce a probability sample of Englishor Spanish-speaking adults in the United States (Waksberg 1978).

## **Response Rates**

The survey response rate<sup>1</sup> is relevant to judging the accuracy of survey estimates. The sample of completed interWhile we do not know whether those who refused to participate in the NSPOF are more or less likely than the national average to ... own a gun, we cannot rule out that possibility.

views will be somewhat unrepresentative if those who refuse to cooperate tend to be different in relevant ways than those who are successfully interviewed. While we do not know whether those who refused to participate in the NSPOF are more or less likely than the national average to, say, own a gun, we cannot rule out that possibility. The larger the group of refusers in comparison with cooperators, the larger is the likely magnitude of "nonresponse bias." The response rate was quite low in the NSPOF, and hence a matter of concern.

The final sample disposition is presented in Table 2.1. Of the 29,917 telephone numbers that were randomly selected, 32 percent were ineligible (not working or not residential). Of the 20,302 telephone numbers in the sampling frame, 6,333 contacts were terminated by Chilton before conducting the interview because the initial responses indicated that the household was not needed to complete pre-established sampling quotas. These quotas were defined for the NSPOF with respect to race and gun-ownership status (Chilton 1995, 16). What remains after netting out these cases is 13,969 telephone numbers of households that are either known to be eligible for inclusion or at least not known to be ineligible. Of these, 2,568 interviews were completed.

There is no single definition for "response rate" (Frey 1989). The appropriate numerator (given our concern

about the representativeness of the completed sample) is the number of households that provided interviews or were willing to do so-that is, completed interviews plus those terminated because the sample quota had been filled. Response-rate measures differ with respect to what is included in the denominator. At a minimum, the denominator includes, in addition to the count of willing participants (the numerator), the count of refusals (3,618 in the case of NSPOF). We believe it appropriate to include also the count of telephone numbers in which a call was never completed (4,724), since this form of nonresponse may also produce an unrepresentative sample.

Less clear-cut is what to do about the other type of nonresponse—those cases (3.059 in all) in which some member of the household had been contacted and been cooperative, but no interview had actually been completed by the time the survey ended despite one or more follow up calls. These cases can be viewed as "cooperators" (because the fact that there was a successful initial contact suggests at least the willingness to cooperate), in which case they would be included in both the numerator and the denominator. Or they could be viewed as non-respondents, since the chosen adult in the household proved somewhat difficult to contact, in which case they should be included in the denominator but not the numerator. We designate them as "initial cooperators," and calculate the response rate in two

## Final NSPOF Sample Disposition

| Total phone numbers in sample   |        | 29,917 |
|---|--------|--------|
| Phone numbers eliminated from sample:                                   |        |        |
| Non-operational   | 6,043  |        |
| Not a household   | 1,775  |        |
| Language barrier<br>(Don't speak English or Spanish)                    | 251    |        |
| Other ineligible  | 1,546  |        |
| Total   | 9,615  |        |
| Phone numbers in sampling frame   | 20,302 |        |
| Phone numbers eliminated from sampling sample Interviews not completed: |        |        |
| Terminated (quota filled)   | 6,333  |        |
| One or more callbacks, no interview                                     | 3,059  |        |
| Unable to complete call   | 4,724  |        |
| Refusals  | 3,618  |        |
| Total   | 17,734 |        |
| Total numbers eliminated  |        | 27,349 |
| Total completed interviews  |        | 2,568  |

Source: Chilton Research Services (June 1995), The 1994 National Study of Private Ownership of Firearms in the United States: Methodology Report. (p. 7).

Note: "Unable to complete call" includes "no answer/busy" and "answering machine." Of the callbacks that did not lead to an interview, 173 were determined to be eligible for the study, while eligibility status was not known for 2,886. Of the refusals, 527 were determined to be eligible.

ways, one with them included as "cooperators" and one with them included as nonrespondents.

If we include the "initial cooperators" in the numerator, the response rate is 59 percent; if we exclude them, the response rate is just 44 percent. In either case, there is clearly a possibility of nonresponse bias in estimates of population parameters. Those who

refuse to be interviewed or who are unavailable to be interviewed may be different from the population as a whole in relevant ways. Hence we urge caution in the interpretation of results based on NSPOF data. On the other hand, there is no reason to believe that this survey has a less representative sample than other commercial telephone surveys. For example, Kleck and Gertz (1995) report a response rate of

## Two Definitions of Response Rate

(# Cooperators) + (# Initial Cooperators)

(# Cooperators + # Initial Cooperators + # Refusers + # Nonrespondents)

(# Cooperators)

(# Cooperators + # Initial Cooperators + # Refusers + # Nonrespondents)

#### where:

# Cooperators count of completed interviews

+ count of interviews terminated by Chilton

# Initial Cooperators count of initial cooperators

# Refusers count of those who refused to give an interview

# Nonrespondents count of those telephone numbers where a call was never

completed

+ count of initial cooperators

61 percent for their national survey of gun ownership and use, defined as the number of households willing to participate divided by the number of completed calls. If we followed this procedure, our response rate would be at least as high as theirs.

## Characteristics of the NSPOF Population

For various reasons, some households were more likely than others to be selected into the final sample of completed interviews. For example, the sampling procedure had the effect of including a disproportionate number of gun-owning households. To account for differences in the probability of selection in the NSPOF, Chilton calcu-

lated population projection weights<sup>2</sup> for both households and persons. Household weights reflect the sampling quotas for gun ownership and race, and include household income as a control variable. Person weights use age, race, sex, education, number of adults in the household, and household income as control variables.

While Chilton's weights did not account for the number of working telephone lines in each contacted household, NSPOF includes data on that item. In the NSPOF sample, 351 respondents (13.7 percent) reported the existence of more than one telephone line. (Responses to this item were missing for an additional 80 survey participants.) In order to account for the greater like-

lihood that a household with two or more telephone lines would be selected to participate, we adjusted the Chilton weights by dividing through by the number of working telephone lines in the respondent's household. Thus, a household with two working telephone numbers would receive one-half the weight of an equivalent household that had one telephone line, as suggested by Sudman (1976). We made an additional modification to ensure that the sample projects to the entire U.S. adult population.

## **Gun Ownership Rates**

## Estimates for Household Gun Ownership

The December 1993 Gallup Poll estimated that 49 percent of households possess a gun, a result that affirms one of the seeming constants in American life: the fraction of American households owning a gun has remained at about half since polling on the subject began in 1959 (Kleck 1991). Given this conventional wisdom, it is of considerable concern that the NSPOF data indicate that just 35 percent (plus or minus 1.3 percent) of households owned a (working) gun in 1994. We believe that this estimate may be somewhat off the mark, but not by much. The conventional wisdom appears out of date.

The best of the available series on gun ownership is the General Social Survey (GSS), conducted by the National Opinion Research Center. Its estimates have been in the range of 40–43 per-

cent during the 1990s, several points lower than during the 1970s and much lower than the Gallup Poll estimate. In particular, the GSS estimate for 1994 was just 41 percent. The Kleck-Gertz survey, conducted in 1993, produced a still-lower estimate of gun ownership, 38 percent of households. Our best guess, then, is that the NSPOF estimate understates the "truth," but only by about five percentage points, rather than the 15-point deficit implied by the conventional wisdom.

What is the cause of this apparent underestimate? One possibility is that the net effect of the various distortions in the NSPOF sample is to underrepresent gun owners. Alternatively, we offer three observations concerning the specifics of how gun ownership is determined in the NSPOF, any one of which may lead to a small negative bias in the gun ownership estimate:

The NSPOF focuses on guns owned by household members aged 18 and older. A household that includes a gun-owning adolescent but no gun-owning adult is counted as a "no gun" household. However, such households are apparently very rare. An NSPOF follow-up of 200 households in which the firstround respondent had indicated that no adult owned a gun found no cases in which a minor in the household owned a gun. Hence we doubt that the focus on adults accounts for the low estimate of gun ownership.

NSPOF data indicate that just 35 percent... of bousebolds owned a... gun in 1994.

The individual who actually owns the gun appears more willing (or able) than other adults in the household to report that the household includes a gun.

- The NSPOF was conducted by telephone, whereas in the GSS respondents are interviewed face-to-face. The 6 percent of U.S. households that lack telephone service will be excluded from the NSPOF sampling frame; that only matters if phoneless households are more likely to own a gun, which we doubt. More important may be the effect of the interview mode (telephone versus face-to-face) on the tendency for the respondent to report gun ownership. While there might be some difference in this regard, we can only speculate as to what it would be.
- The gun ownership question is more complex in the NSPOF than in the GSS. The GSS asks, "Do you happen to have in your home (IF HOUSE: or garage) any guns or revolvers?" The NSPOF asks respondents, "Do you or any members of your household 18 years of age or older currently have any firearms in your home, car, or elsewhere around your home? Do not include airguns, toys, models, or starter pistols." Some NSPOF respondents may become confused by the complexity of this question, and end up giving the wrong answer.

We have more direct evidence on yet another possible explanation for the NSPOF "undercount." Whether a household is reported to have a working gun depends in part on which adult in the household is chosen as the respondent. The individual who actually owns the gun appears more willing (or able) than other adults in the household to report that the household includes a gun. We document that interesting phenomenon below, and provide evidence that using the data on individual, rather than household, ownership has the effect of reducing the negative bias.

## Self-Ownership Versus Household Ownership

Surveys typically interview only one randomly selected adult from each sample household in order to minimize surveying costs. As Smith (1985, 2) notes:

Interviewing each adult in a household is usually considered unnecessary when the information being sought is either 1) household level information accessible to any adult family member...2) a joint behavior shared with the informant...or 3) a basic demographic or observed behavior that is commonly known by household members.

But gun ownership is typically not a "joint behavior" and in some households it may not even be "commonly known" or "accessible."

Evidence on this issue comes from comparing responses by men and women. Given the NSPOF's method for selecting respondents, husbands and wives should be equally likely to re-

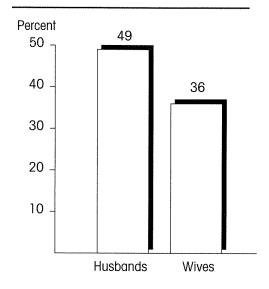
port a gun in the home because they are both describing the same event (gun ownership in households with a married couple). Yet for households headed by a married couple, 49 percent of the husbands report a gun in the home, compared with just 36 percent of the wives. Since this difference is far larger than can be explained by chance, it appears that many wives either do not know about their busband's gun or are reluctant to discuss it with a stranger. Smith (1985) found the same pattern in the GSS, though in that case the difference was only three percentage points (57.2 percent of the husbands versus 54.5 percent of the wives).

This result suggests that reports of self-ownership may be more complete in the NSPOF than reports on household ownership. Population estimates based on self-ownership are much larger than estimates based on household questions. The NSPOF estimates based on a respondent's report of all guns in the household is 107.2 million working fire-arms. The NSPOF estimate based on a respondent's report of his or her own firearms is 192.1 million working fire-arms.

## Estimates for Individual Gun Ownership

Respondents who indicated that a firearm was present in the home were asked the follow-up questions, "How many of the firearms in your household are currently in working order—

## Differences Between Spouses in Reporting a Gun in the Household



that is, they can be fired?" and "Does the gun/do any of these guns belong to you personally?"

Table 2.3 presents self-ownership rates from three surveys: the NSPOF, Kleck and Gertz (1995), and the GSS. The self-ownership estimates from the NSPOF are quite similar to those found by Kleck and Gertz, but about four percentage points lower than in the GSS. That difference could be due to the focus on working firearms in the NSPOF: three percent of respondents who report a firearm in the household indicate that none of these guns are in working order. Overall, we conclude that the NSPOF estimates of individual gun ownership are credible.

In what follows in subsequent chapters, we make far greater use of data on self-ownership than on household ownership.

# Comparison of Personal Gun-Ownership Rates by Survey

|        | Kleck and<br>Gertz | General Social<br>Survey for 1994 | NSPOF |
|--------|--------------------|-----------------------------------|-------|
|        |                    | Percent                           |       |
| Total  | 25.5               | 28.7                              | 24.6  |
| Male   | N/A                | 47.0                              | 41.8  |
| Female | N/A                | 12.7                              | 9.0   |

NA = Not available.

Notes: GSS figures taken from Smith and Smith (1995, 147), from 1994 General Social Survey data. The survey by Kleck and Gertz (1995) was conducted in 1993.

### **Endnotes**

- 1. For a fuller explanation of how the response rate was calculated, please refer to the technical report of the study available from the Police Foundation.
- 2. For a thorough discussion of the population projection weights employed, please refer to the technical report.

## III

# STOCKS AND FLOWS OF GUNS IN PRIVATE HANDS

## Introduction

The NSPOF was designed to gather detailed information on the stock of privately held guns in the United States, including:

- what types of guns are in circulation,
- who owns them,
- · how they were acquired, and
- how they are stored.

This information helps fill a major gap in our knowledge.

## Distribution and Characteristics of the Private Gun Stock

#### Concentration of Ownership

The NSPOF-based estimate for the total number of privately owned firearms is 192 million, of which 65 million (about one third) are handguns, 70 million are rifles, and 49 million are shotguns (Table 3.1). About 40 percent of handguns and long guns are semiautomatics. These estimates are reasonably close to other survey-based estimates and only about 15 percent less than the cumulative total of known additions (imports and domestic manufactures minus exports) since 1899 (Zawitz 1995). While that is not much attrition over nearly a century, the explanation is not so much the durability of guns as in the great upsurge of gun sales in recent decades: NSPOF estimates suggest that 80 percent of all firearms in private hands were acquired since 1974.

While there are enough guns to provide every adult in the United States with one, only one-quarter of adults

NSPOF
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80 percent of
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in private
bands were
acquired
since 1974.

## **Privately Owned Firearms**

|                 | NSPOF<br>Estimate | Guns Entering<br>Circulation,<br>1899–1993* |
|-----------------|-------------------|---|
|                 | Mill              | lions                                       |
| Total**         | 192               | 223   |
| Handguns        | 65                | 77  |
| Revolvers       | 31                |   |
| Semi-automatics | 26                |   |
| Other           | 8                 |   |
| Rifles          | 70                | 79  |
| Semi-automatics | 28                |   |
| Other           | 42                |   |
| Shotguns        | 49                | 66  |

<sup>\*</sup>From Zawitz (1995)

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77 percent of
the total stock
of firearms.

actually own a gun. Those who have one gun usually have several. Seventy-four percent have two or more. As shown in Table 3.2, the owners of four or more guns (about 10 percent of the nation's adults) are in possession of 77 percent of the total stock of firearms.

It is also of interest to consider the concentration of ownership among households, since some households include more than one gun owner. According to the NSPOF results, 35 percent of households include at least one gun, and the relative distribution of guns across households is very similar to the distribution among individuals.

Gun ownership is quite concentrated, but not more so than for other durable goods. In marketing circles, the "80/ 20 rule" suggests that the top fifth of all consumers of a product typically account for four-fifths of all purchases by value (Clotfelter and Cook 1989, 93, 279). NSPOF data indicate that the top 20 percent of gun owners have just 55 percent of the total quantity. (It is possible that if we could adjust for the value of guns, the degree of concentration would be still greater and would better fit the rule.) The bottom line is this: 9.7 million individuals own 105.5 million guns, while the remaining 86.6 million guns are dispersed among 34.4 million individuals.

<sup>\*\*</sup> Includes "other long gun" and "other gun" categories not included above.

## Gun Ownership Across Individuals and Households for Those Who Report Owning at Least One Gun

|                | Individuals<br>Who Own Guns<br>(N=789) | Households<br>That Own Guns<br>(N=1,158) | Gun Stock:<br>Individuals<br>(N=789) | Gun Stock:<br>Households<br>(N=1,158) |
|----------------|--|--|--------------------------------------|---------------------------------------|
|                |  | Percent D                                | estribution                          |                                       |
| 1 gun          | 23.5                                   | 30.1                                     | 5.9                                  | 6.0                                   |
| 2 guns         | 19.6                                   | 22.3                                     | 9.1                                  | 10.7                                  |
| 3 guns         | 12.4                                   | 13.4                                     | 8.6                                  | 10.1                                  |
| 4 or more guns | 42.1                                   | 34.3                                     | 76.5                                 | 73.1                                  |

Note: 35 percent of NSPOF households and 25 percent of individuals report owning at least one gun.

Gun owners who have several guns tend to have a varied collection, including rifles, shotguns, and handguns. Fifty-five percent of individuals who own four guns or more have at least one of each of these three categories. But not everyone who buys a gun is so deeply involved. Of particular concern is the novice who, without having any experience or know-how with guns, buys a pistol for self-protection. While there are such people, we note that two-thirds (68 percent) of handgun owners also own at least one rifle or shotgun, suggesting some experience and interest in the sporting uses of guns. Table 3.3 provides the details.

### **Design Characteristics**

The 200 million guns in private hands include everything from cheap .22caliber "snubbies" to finely made high-powered rifles worth thousands of dollars. The variety of firearm designs reflects the multiplicity of uses for which they are intended. For example, a gun designed to be carried in a pocket or handbag is usually light and short-barreled, while a gun designed with the primary purpose of shooting accurately over long distances will be larger and heavier. The design characteristics of firearms have figured importantly in legislation regulating commerce in firearms. Guns capable of firing continuously ...two-thirds
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shotgun, suggesting some
experience
and interest in
the sporting
uses of guns.

### **Individual Gun Collections**

| Composition of Gun Collection | Millions | Percent Distribution |
|-------------------------------|----------|----------------------|
| 1 handgun                     | 5.5      | 12.4                 |
| 1 long gun                    | 5.8      | 13.1                 |
| 2+ guns, hand only            | 3.6      | 8.1                  |
| 2+ guns, long only            | 10.0     | 22.5                 |
| 2+ guns, both hand and long   | 19.2     | 43.5                 |
| Total                         | 44.3*    | 100.0                |

<sup>\*</sup>Total differs from sum of column entries due to rounding.

The NSPOF includes...design characteristics of respondents' guns. With these data we develop a description of the private gun stock.

with one pull of the trigger are banned from commerce, as are sawed-off shotguns and other "weapons of mass destruction." Handguns are regulated more closely than rifles and shotguns. Small, cheaply made handguns are banned from importation, as are some foreign-made "assault weapons."

The NSPOF includes several items on the design characteristics of respondents' guns. With these data we develop a description of the private gun stock. Among other things, these data may be relevant for evaluating the impact of proposed regulations that distinguish among different types of guns. Respondents who reported personally owning a firearm were asked a series of questions about the characteristics of one gun that was randomly selected from the owner's gun collection. The estimates presented in this chapter are computed by use of the respondent weights multiplied by the number of guns in the respondents' collection.1 These estimates should provide a valid representation of the national stock of guns in private hands. In the discussion below, we focus on the barrel length, caliber, and the number of rounds of ammunition included when the gun is fully loaded.

Table 3.4 provides details on magazine capacity. Owners were asked to

|                           | All Guns<br>(N=789)  | Handguns<br>(N=347) | Long Guns<br>(N=442) |
|---------------------------|----------------------|---------------------|----------------------|
|                           | Percent Distribution |                     |                      |
| Number of rounds:         |                      |                     |                      |
| 1-5 rounds                | 45.9                 | 12.9                | 63.1                 |
| 6 rounds                  | 20.2                 | 38.4                | 10.6                 |
| 7–9 rounds                | 15.6                 | 27.7                | 9.2                  |
| 10-15 rounds              | 13.0                 | 14.6                | 12.1                 |
| 16 or more rounds         | 5.4                  | 6.3                 | 4.9                  |
| Average magazine capacity | 6.6 rounds           | 8.1 rounds          | 5.8 rounds           |

indicate how many rounds of ammunition were included when the gun was fully loaded. (Some guns were equipped with more than one magazine, in which case the owner was asked to provide information for the magazine he used most commonly.) The modal handgun holds six rounds, reflecting the prevalence of revolvers in the handgun stock. But these days most handguns sold are pistols (Zawitz 1995), which typically have larger capacity. Almost half of all handguns hold seven or more rounds. By comparison, only about one-quarter of long guns hold that many rounds.

In 1994 Congress enacted a ban on the sale of magazines holding more than

10 rounds. According to NSPOF results, such magazines were used with 25 million guns in that year.

Questions concerning barrel length and caliber were asked only of those respondents for whom a handgun was randomly selected. The most common caliber is .38 (28 percent) and another 19 percent of guns are close at 9 or 10 millimeters. At the smaller end of the spectrum, the .22 caliber handgun constitutes 23 percent of the stock, and 11.5 percent are .25 or .32. At the larger end, only 8 percent are .44 caliber or larger.

Table 3.5 reports the distribution of handguns by length of barrel. This

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many rounds.

## Size of Handguns in Private Gun Stock

| Length<br>of Barrel      | Percent with<br>Small Caliber | Percent Distribution of Handgun Stock |
|--------------------------|-------------------------------|---------------------------------------|
| 1-3 inches (N=86)        | 36.9                          | 17.5                                  |
| 4-5 inches (N=129)       | 30.7                          | 37.6                                  |
| 6 or more inches (N=132) | 37.5                          | 44.9                                  |
| Total                    | 34.5                          | 100.0                                 |

Note: "Small Caliber" is defined here as .32 or less.

...the majority of short handguns have fairly large caliber, in excess of .32.

characteristic of handguns has been particularly important in the debate over appropriate regulation, because short-barreled handguns are well adapted to street crime in the sense that they are conveniently carried concealed. This, however, is the only advantage of a short barrel; since a short barrel reduces the accuracy and power of the gun, someone who did not want to carry it concealed would ordinarily prefer a longer gun. (In most states carrying a concealed firearm is banned outright or is restricted to those who have a special license.) The 1968 Gun Control Act restricted the importation of short-barreled guns, and there have been recurrent legislative efforts to extend the ban to domestic manufacture.

As shown in Table 3.5, only about one in six handguns have a barrel length of three inches or less—11 million guns in all. The median length of the handgun stock is five inches. In this table we also report the percentage of handguns in each of the length categories that have small caliber (.32 or less).

The important news here is that the majority of short handguns have fairly large caliber, in excess of .32. One implication is that definitions of "Saturday night specials" specifying small caliber do not apply to the majority of short-barreled handguns in the nation's

|                                      | All Guns<br>(N=789)  | Handguns<br>(N=352) | Long Guns<br>(N=437) |
|--------------------------------------|----------------------|---------------------|----------------------|
|                                      | Percent Distribution |                     |                      |
| 0-1 year                             | 10.4                 | 11.5                | 9.7                  |
| 2 years                              | 12.4                 | 16.8                | 9.9                  |
| 3-5 years                            | 14.6                 | 18.0                | 12.7                 |
| 6 or more years                      | 62.7                 | 53.7                | 67.6                 |
| Average years since gun was acquired | 12.8                 | 10.9                | 13.9                 |

firearms stock. It should be kept in mind that caliber has no effect on one of the problematic dimensions of these guns, their concealability (Cook 1981, 1740). Indeed, it appears from other studies that felons have a preference for handguns with short barrels and large caliber (Wright and Rossi 1986; Zawitz 1995). Based on the NSPOF data, we conclude that this preference for larger caliber is shared by nonfelons who own small handguns.

Finally, Table 3.6 lists the years in which respondents' randomly selected guns were acquired. The average gun was acquired about 13 years ago by its current owner. Twenty-two percent of all guns, and 27 percent of handguns,

were acquired by their current owners within the past two years.

## Storage

In 1993, there were 1,740 accidental deaths caused by firearms, including 170 involving children fourteen years old and younger. Moreover, for every fatal gunshot accident there are a number of accidental shootings that cause serious injury. Guns were also the means of destruction in 19,590 suicides, 210 involving a child fourteen or younger (National Center for Health Statistics 1994). For these reasons, the safe handling and storage of firearms has attracted the attention of the public health community.

The average gun was acquired about 13 years ago by its current owner. Twenty-two percent of all guns, and 27 percent of bandguns, were acquired by their current owners within the past two years.

## Storage Methods of Private Gun Stock

|   | All Guns<br>(N=789) | Handguns<br>(N=352) | Long Guns<br>(N=437) |
|---|---------------------|---------------------|----------------------|
|   |                     | Percent             |                      |
| Gun locked up, secured with trigger lock etc. | 45.6                | 43.2                | 46.9                 |
| Gun loaded                                    | 26.2                | 54.7                | 11.0                 |
| Gun loaded and unlocked                       | 16.4                | 34.0                | 7.3                  |

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Despite exhortations by almost every leading gun-related organization that firearms be stored unloaded and under lock and key, a considerable minority of gun owners are in violation of this stricture (Weil and Hemenway 1992, 3035; Cook and Moore 1995, 269). The obvious solution, training, does not appear effective. One recent study found that those who have received formal training in the use of firearms are no more likely than other gun owners to store firearms safely (Weil and Hemenway 1992).

The NSPOF presents two separate opportunities for examining how firearms are stored. First, each respondent who reported having an operable firearm in the household was asked either "Is the gun in your home currently loaded and unlocked?" (if there is just one gun) or "How many of the guns in your home currently are loaded and unlocked?" (if there are several). Second, as part of the sequence of questions concerning the randomly selected firearm, each respondent was asked "Where do you usually keep this gun?" followed by "Is this gun currently locked up or secured with a trigger lock or some other kind of locking device?" and "Is this gun currently loaded?"

We found that 20 percent of all gunowning households had a loaded and unlocked gun in the home at the time of the NSPOF. This figure was significantly higher among households that had a handgun than among households

## Storage Location of Private Gun Stock

|                       | All Guns<br>(N=789)  | Handguns<br>(N=352) | Long Guns<br>(N=437) |
|-----------------------|----------------------|---------------------|----------------------|
|                       | Percent Distribution |                     |                      |
| Bedroom               | 23.7                 | 37.1                | 16.7                 |
| Gun closet            | 44.1                 | 26.5                | 53.3                 |
| Other closet          | 16.6                 | 11.5                | 19.2                 |
| With or on respondent | 3.3                  | 8.7                 | 0.5                  |
| In car or truck       | 2.6                  | 7.7                 | 0.1                  |
| Other                 | 9.7                  | 8.5                 | 10.2                 |

with long guns only (30 versus 7 percent). In Table 3.7 we present the results for the other questionnaire items on storage, those concerning how the randomly selected firearm was stored. We found that 53 percent of long guns and 57 percent of handguns are usually kept unlocked. Further, 26 percent of all guns, and 55 percent of all handguns, are usually kept loaded. Loaded guns of either type are a bit *more* likely to be unlocked than are unloaded guns. The result is that one in three handguns, and one in six long guns, is kept loaded and unlocked.

As shown in Table 3.8, over half (53 percent) of all long guns are kept in a gun closet, while 17 percent are kept in the owner's bedroom and 19 per-

cent are kept in some other type of closet. In contrast, just over one-quarter of all handguns are kept in gun closets, while 37 percent are kept in the owner's bedroom. Nine percent of handguns are regularly stored on the owner's person, with an additional 8 percent regularly stored in a motor vehicle.

### Storage and Training

Each gun owner in the NSPOF was asked "Have you ever had any instruction or training on how to use guns?" and, if so, "From whom have you received training?" Up to three different sources of training were recorded for respondents. Table 3.9 reports the results. The five categories—military, law

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loaded and
unlocked.

## **Training Received by Gun Owners**

|                             | All Gun Owners       | Handgun Owners |
|-----------------------------|----------------------|----------------|
|                             | Percent Distribution |                |
| One or more sources         |                      |                |
| of formal training          | 58.1                 | 56.7           |
| Informal sources of         |                      |                |
| training only               | 29.0                 | 30.6           |
| No training                 | 12.7                 | 12.8           |
| Sources of formal training: |                      |                |
| Military                    | 25.0                 | 24.0           |
| Law enforcement             | 11.9                 | 19.2           |
| National Rifle Association  | 6.6                  | 4.4            |
| Gun club                    | 1.0                  | 2.0            |
| National Safety Council     | 26.0                 | 18.7           |
| and other sources           | 20.0                 | 10.7           |

...adults in gun-owning homes who have received formal training are as likely as those without training to keep a gun unlocked and loaded.

enforcement, National Rifle Association, gun club, and National Safety Council and other sources—constitute what we designate to be "formal training." In all, 58 percent of gun owners have received formal training from at least one of the sources listed. The rest have received either "informal" training (from friends, family, or the person from whom the respondent purchased the firearm) or no training at all.

In Table 3.10, we present results on how training relates to the likelihood of unsafe gun storage. As it turns out, there is little difference among the various training categories in the percentages of respondents who keep a gun unlocked and loaded. Given the standard errors on our estimates, we accept the "null hypoth-

esis" that formal training in the use of firearms does not affect the likelihood of unsafe gun storage.

## Multivariate Analysis for Storage and Training

To further explore this surprising result, we conducted a multivariate logit analysis<sup>2</sup> of data on storage practices by gun owners. The results of this and related analyses confirm that adults in gun-owning homes who have received formal training are as likely as those without training to keep a gun unlocked and loaded. Other control variables made a difference. Not surprisingly, ownership of a handgun, or any sort of gun for protection, was associated with an increased likelihood of

## **Training and Storage Methods**

| Training                        | One or More Unlocked ar<br>Loaded Guns in Househo |  |
|---------------------------------|---|--|
|                                 | Percent   |  |
| All gun owners:                 |   |  |
| R has formal training (N=442)   | 23.9  |  |
| R has informal training (N=245) | 21.7  |  |
| R has no training (N=102)       | 25.4  |  |
| Handgun owners:                 |   |  |
| R has formal training (N=307)   | 29.9  |  |
| R has informal training (N=160) | 32.6  |  |
| R has no training (N=67)        | 29.8  |  |

Note: Figures above are for storage of randomly selected gun in NSPOF; figures are calculated using respondent weights.

keeping an unlocked loaded gun in the home. The likelihood was lower when there were children in the home.

We then explored the null result on training programs in more detail; instead of lumping all forms of "formal training" into a single category, we separated them into the five categories described above. While most forms of formal training had no discernible effect, there was one exception. The training provided by the National Safety Council was associated with a significant reduction in the likelihood of keeping an unlocked, loaded gun. This result either speaks well of that training program or of the people who choose to take it, or perhaps both.

## **Acquisitions**

In 1983 Wright, Rossi, and Daly (315) wrote:

A complicated set of marketing mechanisms holds the key to the circulation of weapons, including trade, sale, and barter among individual gun owners, black-market sales of stolen guns, sales by recognized dealers in firearms, sales or other dispositions by police departments and the military, and so on. Although some of these market mechanisms are known fairly well, what is not known is the share of the total circulation of weapons obtained by each.

The training provided by the National Safety Council was associated with a significant reduction in the likelihood of keeping an unlocked, loaded gun.

R = Respondent.

Almost all guns acquired in the previous two years were either purchased by the respondent ... or received as a gift ....

Not much has been learned about gun flows in the 13 years since the publication of that report. The potential importance of this information is in evaluating regulations on firearms commerce. For example, some regulations apply only to transfers that involve a federally licensed firearms dealer (FFL) (Cook, Molliconi, and Cole 1995, 68-9), so it would be useful to know the volume of informal transfers that do not involve FFLs. But heretofore there has been no survey or other data-gathering mechanism designed to measure the relative importance of primary and secondary flows of guns.

The NSPOF provides a sound basis for making such estimates. The results, developed below, suggest that the secondary market is somewhat less important than previously thought.

In the NSPOF, the sequence of questions concerning the respondent's randomly selected gun concluded with the question "About how many years ago did you acquire this gun?" followed by the question "Have you acquired any other gun since you obtained the one we just finished talking about?" If yes, the interviewer established some basic characteristics of this more recently acquired gun (type and how long ago it was acquired) and then proceeded to a sequence of questions for all gun owners concerning details of the most recent firearm acquisition. Thus, we have the date of acquisition for one or two guns per gun owner, as well as detailed data on each gun owner's most recent acquisition.

### Sources and Means of Acquisition

Our objective is to characterize the flow of guns for a defined period of time. The choice of how long a period to use entailed a trade-off. A longer period, such as the five years preceding the survey, would give us a larger sample size (more acquisitions) than a shorter one, but at the cost of greater recall error and a greater under-representation of those who were most active in the market. In what follows we focus on the results for the two-year period before the survey. Table 3.11 provides some results.

Almost all guns acquired in the previous two years were either purchased by the respondent (73 percent) or received as a gift (19 percent). The remaining 8 percent were obtained through inheritance, a swap of some kind, or other means. The predominant source of guns, not surprisingly, was a store (60 percent). Other important sources included family members (17 percent) and acquaintances (12 percent). The 3 percent of respondents who indicated that they obtained the gun "through the mail" (which is illegal for all but FFLs) may have misremembered or may be referring to a mail-order purchase arranged through an FFL.

The volume of gun acquisitions implied by the 251 NSPOF cases (Table 3.12) is 13.7 million; 6.5 million of these transactions involved a handgun. Note that 60 percent of the long guns and 68 percent of the handguns were new

## Gun Acquisition Within the Past Two Years

|  | All Guns<br>(N=251) | Handguns<br>(N=128)  | Long Guns<br>(N=121) |
|--|---------------------|----------------------|----------------------|
|  |                     | Percent Distribution | on                   |
| What best describes how you obtained your gun? |                     |                      |                      |
| Bought it                                      | 72.8                | 77.3                 | 69.1                 |
| Received it as a gift                          | 19.1                | 15.6                 | 22.3                 |
| Traded something for it                        | 2.8                 | 2.4                  | 3.1                  |
| Inherited it                                   | 4.7                 | 3.7                  | 5.2                  |
| Other  | 0.3                 | 0.2                  | 0.4                  |
| From what source did you obtain this gun?      |                     |                      |                      |
| Gun store                                      | 42.9                | 54.5                 | 32.8                 |
| Pawnshop                                       | 6.2                 | 7.7                  | 5.0                  |
| Hardware, department, other store              | 10.7                | 3.0                  | 17.5                 |
| At a gun show or flea market                   | 3.9                 | 4.2                  | 3.5                  |
| Through the mail                               | 2.8                 | 2.5                  | 3.1                  |
| Member of the family                           | 17.3                | 11.9                 | 21.7                 |
| Friend or acquaintance                         | 12.3                | 13.0                 | 11.8                 |
| Other  | 3.8                 | 2.8                  | 4.6                  |
| Gun was new when respondent first acquired it  | 64.0                | 68.8                 | 60.0                 |

The predominant source of guns, not surprisingly, was a store....

at the time of acquisition. The implication is that 4.5 million handguns and 4.3 million long guns were added to the U.S. gun stock over the two-year period. That estimate is somewhat less than the actual sales volume of new guns in the United States during 1993 and 1994, although the 50–50 split between handguns and long guns is about right. Bureau of Alcohol, Tobacco, and Firearms (ATF) tabulations indicate sales of 3.6 million handguns

and 3.6 million long guns in 1994 (Table 3.12).

Respondents were also asked, "At the time you purchased your (gun/most recent gun), about how much would it have cost to purchase in a store?" Table 3.13 summarizes the responses. The average gun was worth \$392 at the time of transfer, with little difference between handguns and long guns. Fewer than one in twenty guns were valued at less than \$100.

# Annual Average Gun Acquisitions, 1993–1994

|                     | All Guns<br>(NSPOF Data) | New Guns<br>(NSPOF Data) | U.S. Manufactures*<br>Imports-Exports |  |
|---------------------|--------------------------|--------------------------|---------------------------------------|--|
|                     | Thousands                |                          |                                       |  |
| Handguns            | 3,240                    | 2,229                    | 3,602                                 |  |
| Rifles and shotguns | 3,620                    | 2,173                    | 3,598                                 |  |
| All guns            | 6,860                    | 4,402                    | 7,200                                 |  |

<sup>\*</sup> Source: U. S. Bureau of Alcohol, Tobacco and Firearms.

Note: No more than one acquisition is included for each NSPOF respondent.

The average gun was worth \$392 at the time of transfer, with little difference between handguns and long guns.

## **Gun Sources and Gun Regulation**

Estimating the proportion of firearms transfers that involve an FFL, and hence are subject to regulation, is somewhat difficult due to various ambiguities in the answers. In the simplest case the respondent reported purchasing a gun from a store, pawnshop, or other source that (according to the respondent) was licensed. Of guns acquired within the past two years, 57 percent fall into this category (Table 3.14). The ambiguity arises in cases where either the respondent was not sure whether the seller was an FFL or the respondent said that the source was an FFL but then gave other details of the transaction that raised some doubt-for example, the transaction was a trade rather than a cash sale, or the source was an acquaintance or a member of the family. Giving all such cases the benefit of the doubt brings the total up to 64 percent.

An additional 10 percent of all acquisitions were gifts (or inheritances) for which the respondent indicated an FFL as source. Presumably the FFL was not the gift giver in these cases. The reference is probably to cases in which the FFL was the source but some third party was paying. In some of these cases the paperwork in connection with the sale was in the name of the gift giver rather than the ultimate recipient. Those cases would be best considered part of the secondary market, since the regulatory apparatus does not directly affect the final transfer.

## Retail Price of Guns Acquired Within the Past Two Years

|           | All Guns<br>(N=234)  | Handguns<br>(N=116) | Long Guns<br>(N=117) |  |
|-----------|----------------------|---------------------|----------------------|--|
|           | Percent Distribution |                     |                      |  |
| \$0-99    | 3.0                  | 2.8                 | 3.1                  |  |
| \$100-249 | 34.2                 | 29.9                | 37.9                 |  |
| \$250-499 | 41.0                 | 44.9                | 37.9                 |  |
| \$500-999 | 15.6                 | 19.4                | 12.4                 |  |
| \$1,000 + | 6.3                  | 2.9                 | 8.7                  |  |

From this discussion and the statistics in Table 3.14, we conclude that approximately 60 to 70 percent of gun acquisitions occur in the primary market. A somewhat higher percentage of handgun than long gun acquisitions are from the primary market. The remaining acquisitions, amounting to about two million per year, are off-the-books transfers in the secondary market.

## Gun Ownership, Gun Acquisitions, and Gun Control

The 1993 Brady Law instituted a nationwide requirement that handgun buyers submit to a background check (usually including a waiting period) prior to acquiring a handgun. One loophole in this requirement, as discussed above, is that it does not apply to secondary sales. But some buyers with criminal records still attempt to buy from an FFL, and each year tens of thousands are denied access to a handgun because of the results of the background check. Do these denials accomplish anything? Wright (1995, 63) suggests that waiting periods and background checks for handguns are unlikely to have much effect in discouraging gun crime, since "many (and conceivably nearly all) of the new guns coming into circulation are being purchased by people who already own guns." The NSPOF data allow us to determine the accuracy of this assertion.

As seen in Table 3.15, we find that a substantial minority (23 percent) of handgun buyers did not own a gun at

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...are offthe-books
transfers in
the secondary
market.

# Primary Versus Secondary Markets of Guns Acquired Within the Past Two Years

| Primary Market Definition  | All Guns<br>(N=248) | Handguns<br>(N=126) | Long Guns<br>(N=121) |
|--|---------------------|---------------------|----------------------|
|  |                     | Percent             |                      |
| (1) Cash purchase from gun, hardware or department store, from pawnshop, or from seller at gun show, flea market or military, or through mail that respondent says "yes" was FFL | 57.0                | 62.7                | 52.4                 |
| (2) Add cash purchase from seller at gun show, flea market or military, or through mail, that respondent says "probably was/think so"  | 58.4                | 64.2                | 53.6                 |
| <ul><li>(3) Add non-cash transactions</li><li>(trades) with sources in</li><li>(1) and (2)</li></ul>   | 60.1                | 66.4                | 54.8                 |
| (4) Add cash purchases, trades<br>with family, friends/acquaintance<br>that respondent says are or<br>probably are FFL's   | 64.3                | 72.1                | 57.8                 |
| <ul><li>(5) Add giffs, inheritances, prizes<br/>from sources in (1) through (4)</li></ul>  | 73.6                | 84.2                | 64.7                 |

...when we restrict the analysis just to cheaper bandguns... which are used disproportionately in crime, we find that fully 56 percent of buyers did not bave a bandgun at the time of the transaction. So it appears that waiting [periods are] not futile.

the time of their purchase. Thirty-five percent of handgun buyers did not own a handgun at the time of purchase. Moreover, when we restrict the analysis just to cheaper handguns (those with a price less than \$130 in 1994 terms), which are used disproportionately in crime (Cook 1981), we find that fully 56 percent of buyers did not have a handgun at the time of the transaction. So it appears that the waiting period is not futile.

## **Disposals**

#### **Thefts**

One major theme highlighted by Wright and Rossi's survey (1986, 183) of incarcerated felons was that theft is an important source of firearms for those with criminal intentions: 32 percent of surveyed felons had stolen the most recent handgun that they had acquired. Estimates from the National Criminal Victimization Survey (NCVS) suggest

## Gun Ownership at Time of Most Recent Acquisition

|  | Working<br>Firearm | Working<br>Handgun | Gun in<br>Household | Handgun in<br>Household |
|--|--------------------|--------------------|---------------------|-------------------------|
|  |                    | Per                | cent                |                         |
| All gun<br>acquisitions<br>(N=786)         | 74.1               | 35.0               | 79.5                | 38.1                    |
| Gun acquired<br>2 years ago<br>(N=251)     | 82.4               | 48.8               | 87.4                | 51.1                    |
| Handgun acquired<br>2 years ago<br>(N=128) | 76.9               | 65.0               | 80.0                | 69.9                    |

Note: Does not include cases in which the respondent was issued most recently acquired gun for work.

that 340,700 thefts occurred annually from 1987 to 1992 in the U.S. in which one or more firearms were stolen. Separate data from North Carolina suggest that on average 1.5 firearms are stolen per theft (Cook, Molliconi, and Cole 1995, 82) which, if generalizable, implies that about half a million guns are stolen each year nationwide.

As part of the NSPOF survey, all respondents were asked, "In the past 12 months, have you, or has anyone in your household, had any firearms stolen from them? Please do not include theft that might have occurred at work." Answers in the affirmative were followed by the questions "What types of guns were stolen, and how many?" and

"Was this theft incident reported to the police or did they find out in some other way?" Since these items refer to the household gun population, we use the NSPOF household weights in calculating our estimates. However, we remind the reader that in Chapter 2 we produced some evidence to suggest that a large number of firearms may be stored in American households without the full knowledge of all of the adult members living in the home. Presumably, adults who are not aware of the presence of a firearm in the home will also be unaware that the mystery firearm has been stolen. As such, these estimates are almost surely likely to be a lower bound for the number of thefts in the U.S. each year.

...we estimate that there were 211,000 handguns and 382,000 long guns stolen during noncommercial thefts [in 1994].

...600,000
used
bandguns
and 370,000
used
long guns
changed
owners
during the
past year
through
...private

Based on the NSPOF, we estimate that 0.9 percent of all gun-owning households (269,000) experienced during the previous year a theft in which a firearm was stolen. Using the information on the number of firearms that were taken from theft victims, we estimate that there were 211,000 handguns and 382,000 long guns stolen during noncommercial thefts during the past year, for a total of 593,000 stolen guns. These estimates are subject to considerable sampling error, and are not inconsistent with the 511,000 per year figure estimated by Cook, Molliconi, and Cole (1995, 82) from NCVS data for the years 1987 to 1992.

### **Disposing of Guns**

Earlier we examined transactions in second-hand guns from the purchasers' reports. Data from the NSPOF also allow us to estimate used-gun sales from the sellers' reports. Each respondent was asked "In the past 12 months, other than by theft, have you or anyone in your household gotten rid of or otherwise lost a gun you or they owned?" Respondents who indicated that they or someone else had transferred a handgun were then asked, "Please think of the gun you most recently got rid of. How did you get rid of this gun?" [emphasis in original] and "What type of gun did you discard of or lose recently?"

Based on NSPOF responses, we estimate that 3.4 percent of gun-owning households (about 1 million) disposed of a gun in the previous year. Most reported selling the gun or giving it as a gift. Since respondents were not asked to provide the number of guns that were disposed of during the past 12 months, the most we can do is produce a lower bound for the number of used guns that circulated. Our lower-bound figures suggest that half a million guns were sold, another quarter-million were bartered for something else, and 160,000 were given away. Of the firearms that were kept in circulation (transferred to another owner in some way), over 60 percent were handguns. We estimate that 600,000 used handguns and 370,000 used long guns changed owners during the past year through these private transactions.

NSPOF figures indicate that 6,000 firearms were confiscated during the past year by police or other authorities, dramatically lower than previous estimates of up to 200,000 confiscated guns per year (Cook 1993). The underestimate may be due either to underrepresentation of criminals in the sample or reluctance on the part of the respondents to admit to criminal involvement (see Cook 1985). We also estimate that 36,000 guns were thrown away by their owners.

#### **Endnotes**

- 1. For a full discussion of this formula, please see the technical report.
- 2. For a fuller description of this analysis, please see the technical report.

# IV

# GUN OWNERSHIP

## Introduction

A number of surveys have documented the patterns and motivations for gun ownership in the United States. The results from the NSPOF tend to reinforce previous findings. Most long gun owners enjoy the sporting uses of guns, such as hunting and target shooting. For those who own handguns, self-protection is the primary motivation. The people who keep guns for self-protection are for the most part those who also make use of them in recreation. As a result, the patterns of handgun ownership closely parallel patterns of gun ownership overall: gun ownership rates are highest among men, people living in rural areas, and people of middle age and higher income. Almost everyone who currently owns a gun had some experience with guns as a

youth, either in military service or (more commonly) from growing up with guns in the home.

In addition to information on current gun ownership, the NSPOF includes items on previous ownership. From these we find that while 42 percent of men own guns now, another 24 percent owned them previously and then gave them up. Thus two-thirds of men have been gun owners. The cohorts who are currently middle aged (40 through 64) have had the greatest lifetime involvement with guns.

About 5 percent of the nonowners were planning to acquire a gun during the year following the survey for self-defense purposes. Blacks and youths were especially likely to indicate acquisition plans, as were those who had been robbed or attacked recently.

Almost everyone who currently owns a gun had some experience with guns as a youth, either in military service or (more commonly) from growing up with guns in the home.

## Patterns of Gun Ownership

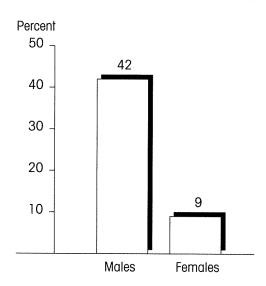
The NSPOF asked all respondents the question "Do you or any members of your household 18 years of age or older currently have any firearms in your home, car, or elsewhere around your home? Do not include airguns, toys, models, or starter pistols" [emphasis in original]. Follow-up questions included, "Are you planning to get a firearm for protection against crime any time in the next 12 months?" [emphasis in originall, "How many of the firearms in your household are currently in working order-that is, they can be fired?" and "Does the gun/do any of these guns belong to you personally?"

Thus, we are only able to identify individual ownership in cases where the respondent answered the preliminary question concerning the number of working guns. In what follows we treat ownership of a gun that is not in working order as equivalent to not having a gun.

From NSPOF data, we estimate that one-quarter of the adult public currently own a working firearm, and 40 percent have owned one at some point in their lives. The majority of all gun owners own a handgun, usually in addition to one or more long guns. The distribution of gun ownership is far from uniform. We explore the patterns in Table 4.1, demographic characteristics; Table 4.2, socioeconomic characteristics; and Table 4.3, other variables.

The most notable demographic divide in gun owning is by sex: 42 percent of

#### **Gun Ownership by Sex**



men, but just 9 percent of women, own a gun. There is a similar disparity for lifetime ownership and for current handgun ownership.

With respect to race, whites are substantially more likely to own guns than blacks, and blacks more likely than Hispanics. Most of the white–black difference evaporates in the case of handgun ownership.

It comes as no surprise that gun ownership is much more prevalent in rural areas and small towns than in cities. Perhaps more surprising is the age pattern, where we see that those aged 40 through 64 have a substantially higher rate than the other age groups.

Table 4.2 displays patterns of gun ownership along socioeconomic dimensions. The results may be surprising to

...gun
ownership
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prevalent in
rural areas
and small
towns than in
cities....Those
aged 40
through 64
have a
substantially
higher rate
than the other
age groups.

## Gun Ownership Patterns: Demographic Characteristics

| Characteristic        | Currently<br>Own<br>Gun | Currently<br>Own<br>Handgun | Ever Owned<br>a Gun<br>(Lifetime) |  |
|-----------------------|-------------------------|-----------------------------|-----------------------------------|--|
|                       | Percent                 |                             |                                   |  |
| Total (N=2,447)       | 24.6                    | 15.7                        | 40.7                              |  |
| Sex:                  |                         |                             |                                   |  |
| Male (N=1,125)        | 41.8                    | 25.9                        | 65.6                              |  |
| Female (N=1,320)      | 9.0                     | 6.6                         | 17.3                              |  |
| Age:                  |                         |                             |                                   |  |
| 18-24 (N=235)         | 15.7                    | 7.8                         | 28.5                              |  |
| 25-39 (N=909)         | 22.7                    | 15.7                        | 35.9                              |  |
| 40-64 (N=976)         | 32.0                    | 20.8                        | 50.1                              |  |
| 65+ (N=351)           | 19.7                    | 10.6                        | 38.7                              |  |
| Race:                 |                         |                             |                                   |  |
| White (N=1,521)       | 26.8                    | 16.5                        | 43.6                              |  |
| Black (N=424)         | 16.1                    | 13.1                        | 30.0                              |  |
| Hispanic (N=404)      | 10.6                    | 7.2                         | 23.4                              |  |
| Marital status:       |                         |                             |                                   |  |
| Never married (N=497) | 18.1                    | 10.8                        | 28.8                              |  |
| Divorced (N=265)      | 27.7                    | 19.8                        | 45.1                              |  |
| Separated (N=88)      | 20.7                    | 10.3                        | 38.4                              |  |
| Widowed (N=169)       | 14.4                    | 11.4                        | 34.0                              |  |
| Married (N=1,398)     | 27.6                    | 17.6                        | 44.8                              |  |
| Community:            |                         |                             |                                   |  |
| Rural (N=410)         | 39.9                    | 22.1                        | 58.4                              |  |
| Small city (N=729)    | 25.7                    | 16.2                        | 43.4                              |  |
| Medium city (N=409)   | 18.7                    | 13.4                        | 38.0                              |  |
| Suburbs (N=307)       | 18.6                    | 14.0                        | 30.2                              |  |
| Large city (N=554)    | 19.7                    | 13.4                        | 31.9                              |  |

Note: Sample N's reported represent number of respondents in group who provided valid response to question of whether they themselves owned a working gun.

## Gun Ownership Patterns: Socioeconomic Characteristics

| Characteristic                  | Currently<br>Own<br>Gun | Currently<br>Own<br>Handgun | Ever Owned<br>a Gun<br>(Lifetime) |
|---------------------------------|-------------------------|-----------------------------|-----------------------------------|
|                                 |                         | Percent                     |                                   |
| Education:                      |                         |                             |                                   |
| < High school (N=349)           | 17.9                    | 9.7                         | 32.8                              |
| HS diploma (N=817)              | 23.6                    | 15.3                        | 40.1                              |
| Some college (N=691)            | 29.6                    | 19.0                        | 46.7                              |
| College degree (N=277)          | 26.5                    | 17.5                        | 42.8                              |
| Graduate degree (N=214)         | 31.0                    | 21.9                        | 47.6                              |
| Income (thousands):             |                         |                             |                                   |
| \$0-10 (N=281)                  | 10.8                    | 4.8                         | 31.0                              |
| \$10-20 (N=414)                 | 17.6                    | 11.5                        | 36.7                              |
| \$20-30 (N=369)                 | 33.5                    | 19.7                        | 47.7                              |
| \$30-50 (N=553)                 | 30.5                    | 20.4                        | 47.3                              |
| \$50-75 (N=296)                 | 26.5                    | 18.0                        | 38.7                              |
| \$75 and over (N=197)           | 32.5                    | 22.8                        | 47.9                              |
| Occupation:*                    |                         |                             |                                   |
| Professional, technical (N=441) | 27.4                    | 17.7                        | 41.6                              |
| Manager, administrator,         |                         |                             |                                   |
| sales workers (N=416)           | 26.3                    | 19.6                        | 41.3                              |
| Clerical (N=281)                | 18.6                    | 10.2                        | 28.6                              |
| Craffsmen, operatives (N=495)   | 36.8                    | 22.9                        | 62.8                              |
| Farmer, farm laborers (N=235)   | 61.3                    | 26.1                        | 87.7                              |
| Service workers (N=235)         | 10.9                    | 6.7                         | 28.8                              |
| Military service:               |                         |                             |                                   |
| Veteran (N=345)                 | 50.5                    | 34.7                        | 74.4                              |
| Armed forces personnel          |                         |                             |                                   |
| on active duty (N=132)          | 21.1                    | 13.2                        | 37.8                              |
| None (N=1,934)                  | 20.6                    | 12.8                        | 35.0                              |

<sup>\*</sup>Defined to correspond to Kleck (1991, p. 56–7). Definitions as follows (NSPOF categories in parentheses): Professional, technical (professional specialty, or technicians and related support); Manager, administrator, sales workers (Executive, administrative, and managerial, or sales); Clerical (administrative support, including clerical); Craftsmen, Operatives (mechanics and repairers, construction trades, extractive and precision production, machine operators, assemblers and inspectors, transportation and material moving, handlers, equipment cleaners, helpers, and laborers); Farmers, farm laborers (farm operations, other agriculture or related, forestry, logging, fishers, hunters and trappers); Service workers (service, except protective).

## Gun Ownership Patterns: Other Variables

|                                  | Currently<br>Own Gun | Currently<br>Own Handgun | Ever Owned<br>a Gun (Lifetime) |
|----------------------------------|----------------------|--------------------------|--------------------------------|
|                                  |                      | Percent                  |                                |
| Parents had gun in home:         |                      |                          |                                |
| Yes (N=1,376)                    | 35.5                 | 22.7                     | 54.4                           |
| No (N=1,048)                     | 11.4                 | 7.4                      | 23.5                           |
| Political views:                 |                      |                          |                                |
| Liberal (N=608)                  | 21.0                 | 15.2                     | 37.4                           |
| Moderate (N=661)                 | 23.8                 | 12.2                     | 39.9                           |
| Conservative (N=962)             | 30.7                 | 20.9                     | 46.6                           |
| Arrested for non-traffic offense | :                    |                          |                                |
| Yes (N=160)                      | 37.4                 | 26.4                     | 63.6                           |
| No (N=2,219)                     | 24.1                 | 15.2                     | 39.4                           |

anyone whose concept has been formed by images of gun violence in the inner city. In fact, gun ownership is more prevalent among the middle class than among the poor. In particular, the prevalence of ownership is greater for those with some college education than those without, and greater for those whose household income exceeds \$20,000 than those with lower incomes. With respect to occupation, most farmers and farm workers own a gun, and skilled blue-collar workers (craftsmen, operatives) are also relatively likely to own a firearm. Half of all veterans own a gun.

Table 4.3 offers results for three unrelated variables. First, we see the apparent importance of childhood expe-

rience in the decision to own a gun. Those whose parents kept guns are three times as likely as others to own one themselves. In fact, 80 percent of all current gun owners report that their parents kept a gun in the home.

Two other associations are of general interest. With respect to political views, conservatives are more likely to own a gun than moderates or liberals. And it is somewhat worrisome that those who admit to ever having been arrested for a nontraffic offense have a relatively high ownership rate (37 percent) compared to the norm.

Finally, Table 4.4 presents gun- and handgun-ownership rates stratified by responses to various attitudinal items

...those who admit to ever having been arrested for a nontraffic offense have a relatively high ownership rate (37 percent) compared to the norm.

in the NSPOF. Respondents who feel safe alone at home in the evening, or alone out in the neighborhood at night, are slightly more likely to own a gun than respondents who do not feel safe. Respondents who have been the victim of a burglary or robbery over the past 12 months are more likely to own a gun than other adults. As is usually the case, handgun ownership patterns match patterns of ownership for all guns.

Gun
ownership
is becoming
less common
among men.
Gun
acquisition
is bigbest
among those
men who
came of age
just after
World War II....

It comes as no surprise that respondents who oppose laws to ban private gun ownership are more likely to own guns than proponents of such measures. What *does* come as a surprise is that 8 percent of respondents who support such measures personally own a gun. Finally, respondents who believe that crime rates in their neighborhoods are increasing over the past 12 months are more likely to own a gun than those who report a steady or decreasing crime rate.

## **Gun Ownership Across Cohorts**

Respondents who reported ever owning a gun were also asked, "How old were you when you got your first gun?" As shown in Table 4.5, data on the age of first gun acquisition provide us with some clues about whether the prevalence of gun ownership differs across cohorts of American adults. Several age cutoffs are presented along the top of the table, while each cell in the table presents the proportion of the respective cohort that acquired a firearm by

this age. Since younger cohorts have not yet reached all of the ages listed along the top of the table, the number of cohorts included in the comparisons decreases as the age cutoff increases.

Gun ownership is becoming less common among men. Gun acquisition is highest among those men who came of age just after World War II (born 1930 through 1943), followed by baby boomers born between 1944 and 1953. Relative to these men, more recent cohorts were less likely to have acquired a gun by the age of 21 or 31.

For women the largest change appears to have occurred between the oldest cohort and those born after 1930. Beyond those cohorts there is no obvious pattern. These results are consistent with Smith and Smith's (1995, 147) findings that the proportion of women who own a gun has been fairly constant from 1980 through 1994.

## Reasons for Ownership

Previous surveys suggest that more than half of all gun owners have their firearms *primarily* for hunting or other sporting purposes and that a vast majority of gun owners indicate that sporting use is *one* reason they own a gun. At the same time, a significant proportion of respondents report protection as a reason for owning a gun. Another theme that has emerged from the literature is that handguns and long guns are purchased for different reasons. The majority of handguns are kept primarily for protection against crime.

## Gun Ownership Patterns and Experiences with Crime

| Experience with Crime  | Own Gun              | Own Handgun          |
|--|----------------------|----------------------|
|  | Percent              |                      |
| Feelings of safety while alone at home at night:  Very or somewhat safe (N=2,196)  Very or somewhat unsafe (N=234)             | 24.7<br>22.3         | 16.0<br>14.2         |
| Feelings of safety while alone out in the neighborhood<br>Very or somewhat safe (N=1,789)<br>Very or somewhat unsafe (N=570)   | d:<br>25.8<br>21.2   | 16.3<br>15.7         |
| Home has been burgled in past 12 months:<br>Yes (N=91)<br>No (N=2,353)   | 28.9<br>24.4         | 23.1<br>15.5         |
| Robbed/attacked in past 12 months:  Yes (N=142)  No (N=2,302)  | 29.1<br>24.3         | 22.2<br>15.4         |
| Perceived trend in crime rates in neighborhood over past 12 months:  Going down (N=159)  Stay same (N=1,713)  Going up (N=484) | 20.8<br>24.5<br>28.2 | 15.7<br>15.5<br>19.0 |

Threequarters
of all long
gun owners
report baving
a long gun
primarily for
sporting
purposes...

Note: For the N's here, we use the number of respondents in a group that gave us a valid response to the question of whether they themselves owned a working gun.

#### Reasons for Owning a Gun

Handgun-owning respondents were asked, "What is the most important reason why you own a handgun?" Similarly, respondents who own at least one long gun were asked, "What is the most important reason you own a long gun?" In Table 4.6, we tabulate their responses according to the composition of their gun collection: those who own

only long guns, only handguns, or one or more of each. The latter group is included twice, since they provided reasons for both types of guns.

Three-quarters of all long gun owners report having a long gun primarily for sporting purposes, including hunting and target shooting. The large majority of handgun owners have a handgun primarily for self-defense. Note, how-

## **Gun Ownership by Cohort**

| Sex and Age<br>(in 1994) | Owned Gun<br>Before Age 21 | Owned Gun<br>Before Age 31 | Owned Gun<br>Before Age 41 | Owned Gun<br>Before Age 51              |
|--------------------------|----------------------------|----------------------------|----------------------------|---|
|                          |                            | Percent [                  | Distribution               |   |
| Males, 21–30             | 48.3                       |                            |                            |   |
| Males, 31–40             | 44.1                       | 54.5                       |                            |   |
| Males, 41-50             | 51.9                       | 62.7                       | 69.1                       |   |
| Males, 51–64             | 59.3                       | 72.8                       | 76.4                       | 78.1                                    |
| Males, 65 +              | 47.9                       | 60.9                       | 66.0                       | 69.3                                    |
| Females, 21–30           | 5.2                        |                            |                            | *************************************** |
| Females, 31-40           | 5.2                        | 16.4                       | •                          |   |
| Females, 41-50           | 4.2                        | 10.9                       | 17.1                       |   |
| Females, 51–64           | 9.4                        | 13.2                       | 17.6                       | 22.4                                    |
| Females, 65 +            | 2.8                        | 5.4                        | 7.1                        | 8.9                                     |

Note: All respondents who have ever owned a firearm were asked, "How old were you when you got your first gun?"

Focusing
on bandgun
owners...,
63 percent
own a gun
primarily for
protection
against crime.

ever, that for a few respondents hunting or target shooting is the most important reason. Note also that in the "handgun only" group, for whom handgun ownership is mostly utilitarian, 40 percent are women, compared to their lower than 15 percent representation in the other two groups.

Overall, 46 percent of gun owners own some kind of gun primarily for protection against crime. The figure is 41 percent for males, and 67 percent for females. (Respondents were not asked about secondary reasons for owning a gun.) Focusing on handgun owners (irrespective of whether or not a long gun is also owned), 63 percent own a gun primarily for protection against crime. The proportion is much higher

for female handgun owners than for males (84 versus 57 percent).

## Reasons for Not Owning a Gun

Respondents who did not personally own a gun at the time of the NSPOF interview were asked, "Why don't you personally own a gun now?" Chilton interviewers were instructed to probe for additional reasons, using the follow up question "Why else don't you own a gun?" Up to five reasons were recorded for each respondent.

We have grouped their reasons into seven categories, as presented in Table 4.7. The most prevalent reason for not owning a firearm was affordability; 27 percent of respondents listed this as the most important reason for not own-

## Primary Reasons for Owning a Gun

Own Both

2.3

1.2

8.9

Own Both

2.4

2.9

13.0

|                       | Hand-<br>gun<br>Only<br>(N=206) | Long<br>Gun<br>Only<br>(N=266) | (Gave Reason<br>for Owning<br>Handgun)<br>(N=314) | (Gave Reason<br>for Owning<br>Long Gun)<br>(N=314) |  |
|-----------------------|---------------------------------|--------------------------------|---|--|--|
|                       | Percent Distribution            |                                |   |  |  |
| Self-defense          | 74.4                            | 14.9                           | 55.9  | 12.4   |  |
| Hunting               | 0.5                             | 69.9                           | 12.2  | 65.8   |  |
| Target/sport shooting | 10.8                            | 6.1                            | 13.3  | 9.3  |  |

0.4

0.3

8.4

Own

Note: Table excludes the response "don't know."

Gun collection

Job-related

Other reason

Own

0.9

4.7

7.9

ing a gun, and 33 percent of respondents who do not currently own a firearm give cost as one reason for not having a gun. Only a small (12 percent) proportion of this cost-conscious group had any concern that might stop them from obtaining a gun if they could find one cheap enough or if their income increased.

There is a large group of people, however, who are actively opposed to having a gun in their homes, because they view guns as too dangerous or for some other reason. Twenty-two percent of nonowners indicated that guns are dangerous, and 17 percent mentioned their children as a reason for not having a gun. Others (21 percent) were opposed to guns for various principled reasons. When we compare male and female nonowners, we find proportionately fewer women than men are dissuaded from owning a gun by price, though women are more likely to report the presence of children, the dangers of gun ownership, or moral objections as a reason for not having a firearm.

These results are calculated using adults without guns who live in homes both with and without a gun. When the sample is restricted to only those gunless adults living in gunless households, the proportions of respondents who cite expense, the danger of guns, and the presence of children as a reason for not having a gun all increase.

With respect to the potential for growth in gun ownership in the United States

The most prevalent reason for not owning a firearm was affordability... roughly onethird of gunless adults are at least open to the possibility of obtaining one and might do so if their financial problems eased or their motivation became stronger.

## Reasons for Not Owning a Gun

|                                    | Percent |  |
|------------------------------------|---------|--|
| Can't afford one, too expensive    | 32.9    |  |
| Guns are dangerous to have         | 21.6    |  |
| Opposed to guns*                   | 21.2    |  |
| Have children                      | 17.3    |  |
| Have no need for one               | 9.4     |  |
| Someone else in household owns gun | 7.1     |  |
| Can't shoot, not trained           | 3.6     |  |

<sup>\*</sup>Includes the responses: Moral objections, guns are immoral; against guns; don't believe in guns; don't like guns; don't want a gun, not interested; don't want a gun in the house; had a bad experience with a gun; guns don't solve problems; guns only for the police.

Overall,
4.7 percent
of the adult
public said
they [did not
own a gun
but]...were
planning to
obtain a gun
within the next
12 months for
protection
against
crime...

we conclude that many of those who currently lack a gun (roughly one-third of gunless adults) are at least open to the possibility of obtaining one and might do so if their financial problems eased or their motivation became stronger. For many the motivation may come from an increased concern about crime. Indeed, nearly 5 percent of respondents reported that they were planning to obtain a gun for protection against crime soon, within the subsequent 12 months.

#### **Plans for Purchase**

Nonowners were asked whether they were planning to obtain a gun within the next 12 months for protection against crime. Overall, 4.7 percent of

the adult public said they were. Since the handgun is the weapon of choice for self-defense, we believe that most of those who said yes intended to obtain a handgun. For that reason, Table 4.8 compares the prevalence of plans to obtain a self-protection gun with the actual prevalence of handguns.

If these plans had been realized, the overall handgun ownership rate would have increased by about 30 percent (from 16 percent to over 20 percent) during the year following the survey. For blacks, handgun ownership would have nearly doubled. Of course, nothing like this actually occurred, and respondents' statements on this item should not be taken literally. But they do offer some insight into the link be-

## Current Ownership and Plans for Acquiring a Gun for Protection: Individual Characteristics

| Characteristic                   | Currently<br>Own<br>Handgun | Nonowners Who<br>Plan to Get Gun<br>in Next Year |
|----------------------------------|-----------------------------|--|
|                                  | Percent                     | of All Adults                                    |
| Total (N=2,447)                  | 15.7                        | 4.7  |
| Sex:                             |                             |  |
| Male (N=1,125)                   | 25.9                        | 5.4  |
| Female (N=1,320)                 | 6.6                         | 4.0  |
| Race:                            |                             |  |
| White (N=1,521)                  | 16.5                        | 3.5  |
| Black (N=424)                    | 13.1                        | 11.6   |
| Hispanic (N=404)                 | 7.2                         | 8.2  |
| Arrested for nontraffic offense: |                             |  |
| Yes (N=160)                      | 26.4                        | 7.7  |
| No (N=2,219)                     | 15.2                        | 4.5  |

Notes: N's represent number of respondents in group who provided valid response to question of whether they own a working gun. Only those who said they did not own a gun were asked about plans for acquiring one.

tween crime and the demand for guns, and reinforce our previous findings, which suggest the potential for fairly substantial increases in protective gun ownership.

Table 4.9 develops this linkage. Concerns about crime and personal safety were closely associated with plans to obtain a gun for protection. For example, 7 percent of those who believed crime was increasing in their neighborhood planned to obtain a gun, compared with just 4 percent of those who believed crime was not increasing.

Also of interest is the relationship between current handgun ownership and concern about crime. Respondents who felt unsafe at home or in their neighborhoods had about the same rate of current ownership as those who felt safe, but they were much more likely to report that they planned to obtain a gun. Those who reported being victims of burglary or robbery during the previous year were somewhat more likely than others to own a handgun. Whether they obtained that gun before or after the crime cannot be determined.

## Current Ownership and Plans for Acquiring a Gun for Protection: **Experience with Crime**

| Experience  | Own Handgun  | Nonowners Who<br>Plan to Get Gun<br>in Next Year |
|---|--------------|--|
|   | Percent of A | All Adults                                       |
| Feelings of safety while alone at home at night:                    |              |  |
| Very or somewhat safe (N=2,196)                                     | 16.0         | 4.0  |
| Very or somewhat unsafe (N=234)                                     | 14.2         | 12.1   |
| Feelings of safety while alone out in the neighborhood at night:    |              |  |
| Very or somewhat safe (N=1,789)                                     | 16.3         | 3.8  |
| Very or somewhat unsafe (N=570)                                     | 15.7         | 8.8  |
| Home has been burgled in past 12 months:                            |              |  |
| Yes (N=91)  | 23.1         | 2.2  |
| No (N=2,353)  | 15.5         | 4.7  |
| Robbed/attacked in the past 12 months:                              |              |  |
| Yes (N=142)   | 22.2         | 11.0   |
| No (N=2,302)  | 15.4         | 4.3  |
| Favors law making illegal for private citizens to own gun:          |              |  |
| Yes (N=725)   | 5.1          | 4.2  |
| No (N=1,634)  | 21.9         | 5.2  |
| Perceived trend in crime rates in neighborhood over past 12 months: |              |  |
| Going down (N=159)  | 15.7         | 4.5  |
| Staying the same $(N=1,713)$  | 15.5         | 4.0  |
| Going up (N=484)  | 19.0         | 7.4  |

Note: N's represent number of respondents in group who provided valid response to question of whether they own a working gun.

## Perceptions of Safety Among Unarmed Residents of Armed Households

| Perception of Safety<br>Knowing That Someone<br>Else in the Household | Males<br>(N=43) | Females<br>(N=312) | Total<br>(N=355) |
|---|-----------------|--------------------|------------------|
| Has a Gun   |                 |                    |                  |

|                               |      | Percent Distribution |      |
|-------------------------------|------|----------------------|------|
| Not at all safe/not very safe | 2.3  | 5.2                  | 4.8  |
| Somewhat safe                 | 23.5 | 30.6                 | 29.5 |
| Very safe, extremely safe     | 74.3 | 64.2                 | 65.8 |

# Feelings of Safety with a Gun in the Home

While most gun owners reported increased feelings of safety from their own firearms, in a recent telephone survey Hemenway, Solnick, and Azrael (1995, 124) found that 85 percent of adults who did not own guns reported that they would feel less safe if more members of their community obtained a firearm. Thus, it appears that the acquisition of guns adversely affects other members of the community. But what effect is there on other members of the same household? Do gunless adults in gun-owning households feel safer or less safe with a gun in the home?

Respondents who reported a firearm in the household but indicated that they did not themselves own a gun were asked, "How safe do you feel knowing that someone in your household has a gun? Do you feel ... ?" The responses that were read to participants were "extremely safe, very safe, somewhat safe, not very safe, and not at all safe."

As seen in Table 4.10, only a small minority of gunless adults (5 percent for women, 2 percent for men) report feeling "not at all safe" or "not very safe" knowing that someone else in the household owns a gun. Most adults who live in a gun-owning household, who do not themselves own a gun, believe they are very safe. The question is a bit ambiguous. We do not know whether they are reporting that they are not worried about the possibility of an accident with the gun or whether they feel the gun provides protection against outsiders. In either case, conflict within households over guns is apparently rather rare.

Most adults who live in a gun-owning household, who do not themselves own a gun, believe they are very safe.

# V

# Gun Uses and Misuses

### Introduction

In this chapter, we examine a collection of topics related to the use and misuse of firearms:

- the prevalence of firearms training among the adult population in the United States, and in particular for gun owners and those living with guns in the home;
- the recreational uses of guns, in particular hunting and sport or target shooting;
- firearm accidents; and
- gun carrying.

## Firearms Training

The following question was asked of all respondents in the NSPOF: "Have you ever had any instruction or training on how to use guns?" Respondents who said yes were then asked about the sources from which training was received. Chapter 3 presented some results from these items on training in connection with our analysis of gunstorage practices. We now develop a more comprehensive picture of how Americans learn the skills necessary to handle guns safely.

As indicated in Tables 5.1 and 5.2, about three-quarters of American men and over one-third of women have received some instruction or training in how to use a gun. Over half of all men have received "formal" training—that is, training from a professional instructor provided by law enforcement or other security agencies, the National Rifle Association, gun clubs, the Scouts, the National Safety Council, or (most commonly) the armed forces. Most

...threequarters of American men and over one-third of women have received some instruction or training in bow to use a gun.

## Firearms Training

|  | Males<br>(N=1,186) | Females<br>(N=1,382) | Total<br>(N=2,568) |
|--|--------------------|----------------------|--------------------|
|  |                    | Percent              |                    |
| Personally owns firearm                              | 41.8               | 9.0                  | 24.6               |
| Reports firearm in household                         | 48.5               | 29.2                 | 38.4               |
| Received instruction/training on how to use guns     | 75.7               | 36.5                 | 55.1               |
| Received instruction in<br>"formal" training program | 55.6               | 10.7                 | 32.0               |
| Received instruction informally                      |                    |                      |                    |
| Source:*   |                    |                      |                    |
| Parent   | 12.7               | 11.8                 | 12.2               |
| Other relative                                       | 5.3                | 13.5                 | 9.6                |
| Friend/acquaintance/neighbor                         | 4.3                | 4.9                  | 4.6                |
| Other  | 0.7                | 0.0                  | 0.4                |

<sup>\*</sup> Includes as many as three sources per respondent.

Almost all gun owners... bave received some sort of training and 58 percent of them bave participated in a formal training program.

women, on the other hand, receive their training informally from a parent or other relative.

The military is an important source of training for gun owners. All told, 29 million people received training from the military, 9 million from a law enforcement or private security agency, 7 million from the National Rifle Association, 5 million in school, and 4 million in Scouts. Another 16 million adults participated in other formal training programs, such as those sponsored by the National Safety Council (Table 5.2).

Who gets trained? Almost all gun owners (87 percent) have received some sort of training and 58 percent of them

have participated in a formal training program (Table 5.3). (Only about 23 percent of other adults have received formal training.) Among gun owners, men are much more likely than women to have had formal training. Regardless of gender, gun owners with formal training tend to be better educated and have somewhat higher incomes than those who lack formal training.

# Recreational Uses of Firearms

While hunting with a gun has been declining somewhat in popularity over the last several decades, millions of Americans still hunt for sport or to supple-

## **Population Estimates for Firearms Training**

| Source   | Males      | Females    | Total      |
|--|------------|------------|------------|
|  |            | Millions   |            |
| Military   | 27.1       | 1.9        | 29.0       |
| Law enforcement/<br>private security                       | 6.0        | 3.2        | 9.2        |
| National Rifle Association                                 | 5.6        | 1.1        | 6.7        |
| Gun club/shooting range                                    | 0.8        | 0.5        | 1.3        |
| Other formal training<br>(such as National Safety Council) |            | 3.3        | 16.4       |
| Scouts<br>Schools  | 3.9<br>3.3 | 0.3<br>1.4 | 4.3<br>4.7 |

Note: "Formal" training program includes training from military, law enforcement/security personnel, NRA instructor, gun club, other formal training, Scouts, or school program.

ment the household larder. The NSPOF included several items on this and other sporting uses, including "Thinking about just the past 12 months, have you used any guns in this household to go hunting?" Respondents were also asked, "How about target or sport shooting? In the past 12 months have you used any guns in this household to do any kind of target or sport shooting, besides hunting?" Respondents who answered yes to either question were then asked to provide the number of days over the past 12 months that they had used a gun to hunt or engage in sport shooting, and also to describe the type of gun the respondent used "most frequently" for this activity over the last year.

As seen in Table 5.4, our estimates indicate that about 35 percent of gun owners hunted in 1994. Thirty-five percent of owners engaged in sport shooting. These estimates imply that about 8 percent of all adults (16 million) went hunting at least once in 1994, and 16 million Americans participated in sport shooting. Taking account of the substantial overlap between the two groups, 23 million—about half—of gun owners participated in a gun sport during 1994.

In Table 5.5, we see that rifles and shotguns are equally popular with hunters, while hunting with a handgun is quite rare. Only 1.5 percent of hunters ...23 million
—about
balf—of gun
owners
participated
in a gun
sport during
1994.

## **Gun Ownership and Training**

|                                | Nonowners<br>in Gun-Free<br>Households<br>(N=1,262) | Nonowners<br>in Households<br>with Guns<br>(N=396) | Gun<br>Owners<br>(N=789) |
|--------------------------------|---|--|--------------------------|
|                                |   | Percent  |                          |
| Has received training          | 41.3  | 56.4   | 87.3                     |
| Has received "formal" training | 23.3  | 22.0   | 58.1                     |

## Prevalence of Recreational Gun Use

|                                      | All<br>Adults | Gun<br>Owners | Estimated<br>Adults |
|--------------------------------------|---------------|---------------|---------------------|
|                                      | Percent       |               | Millions            |
| Hunted during past year              | 8.2           | 35.0          | 15.5                |
| Went sport shooting during past year | 8.2           | 35.3          | 15.6                |
| Either hunted or went sport shooting | 12.1          | 52.1          | 23.0                |

Type of Gun Used by Recreational Gun Users

|  | Males   | Females              | All Adults |
|--|---------|----------------------|------------|
|  |         | Percent Distribution |            |
| Gun used most frequently for hunting in past 12 months:        | (N=226) | (N=30)               | (N=256)    |
| Rifle  | 1.7     | 0.0                  | 1.5        |
| Handgun  | 46.2    | 51.3                 | 46.8       |
| Shotgun  | 49.8    | 48.7                 | 49.7       |
| Other gun  | 2.3     | 0.0                  | 2.0        |
| Gun used most frequently for sport shooting in past 12 months: | (N=241) | (N=52)               | (N=293)    |
| Handgun  | 48.3    | 60.4                 | 50.2       |
| Rifle  | 27.6    | 15.8                 | 25.8       |
| Shotgun  | 20.2    | 21.7                 | 20.4       |
| Other gun  | 3.8     | 2.1                  | 3.6        |

used a handgun most frequently. On the other hand, half of sport shooters typically use a handgun of some sort.

The descriptive statistics presented in Table 5.6 suggest that sport shooters and hunters are in general fairly representative of all gun owners with respect to education and income. Recreational shooters (sport or hunting) are slightly less likely than other gun owners to be black. Hunters are more likely to have been raised in rural areas or to live in rural areas as adults, and they are less likely to live in the Northeast.

## **Gun Accidents**

There is considerable uncertainty regarding the number of accidental gunshot woundings that occur each year. Part of the problem is definition. Of the 40,230 people killed by gunshot in 1993, 1,740 were classified as accidents, as opposed to suicides or homicides. At the margins, that distinction is hazy even in principle. Is a gunshot wound suffered while playing Russian roulette a suicide or an accident? What about a shooting that is unintentional but grossly negligent, as when one person

...rifles and shotguns are equally popular with bunters, while bunting with a bandgun is quite rare.

## **Characteristics of Recreational Gun Users Versus Others**

| Characteristic              | Sporting Gun<br>Owners<br>(N=415) | Non-Gun<br>Owners<br>(N=1,658) | Non-Sporting<br>Gun Owners<br>(N=492) |
|-----------------------------|-----------------------------------|--------------------------------|---------------------------------------|
|                             |                                   | Percent Distribution           |                                       |
| Sex:                        | wa.                               |                                |                                       |
| Male                        | 82.1                              | 33.2                           | 73.0                                  |
| Female                      | 17.9                              | 66.8                           | 27.0                                  |
| Race:                       |                                   |                                |                                       |
| White                       | 87.9                              | 78.1                           | 87.1                                  |
| Black                       | 4.4                               | 9.5                            | 7.6                                   |
| Hispanic                    | 2.9                               | 7.5                            | 2.4                                   |
| Other                       | 4.9                               | 4.8                            | 2.9                                   |
| Education:                  |                                   |                                |                                       |
| Less than high school       | 7.5                               | 15.1                           | 11.9                                  |
| High school                 | 28.8                              | 33.2                           | 33.0                                  |
| Some college                | 34.6                              | 25.1                           | 27.0                                  |
| College degree (bachelor's) | 12.4                              | 12.8                           | 13.7                                  |
| Advanced degree             | 16.6                              | 13.7                           | 14.4                                  |
| Armed forces personnel:     |                                   |                                |                                       |
| Veteran                     | 27.9                              | 9.1                            | 31.3                                  |
| Income (thousands):         |                                   |                                |                                       |
| \$0–20                      | 20.3                              | 39.1                           | 24.6                                  |
| 20–50                       | 47.7                              | 35.2                           | 46.0                                  |
| 50 and over                 | 31.9                              | 25.6                           | 29.4                                  |
| Don't know, missing         | 6.7                               | 14.9                           | 10.4                                  |
| Community where residing:   |                                   |                                |                                       |
| Rural                       | 32.2                              | 13.2                           | 27.0                                  |
| Small town                  | 34.0                              | 32.3                           | 33.3                                  |
| Medium city                 | 9.3                               | 17.7                           | 14.0                                  |
| Suburbs                     | 9.6                               | 15.6                           | 10.5                                  |
| Large city                  | 15.0                              | 21.3                           | 15.2                                  |
| Community where raised:     |                                   |                                |                                       |
| Rural                       | 42.2                              | 26.6                           | 39.6                                  |
| Small town                  | 29.2                              | 29.6                           | 29.1                                  |
| Medium city                 | 10.2                              | 13.4                           | 10.2                                  |
| Suburbs                     | 10.6                              | 12.4                           | 8.0                                   |
| Large city                  | 7.7                               | 18.0                           | 13.1                                  |
| Census region:              |                                   |                                |                                       |
| Northeast                   | 12.2                              | 22.7                           | 13.0                                  |
| Midwest                     | 23.5                              | 24.8                           | 23.3                                  |
| South                       | 41.6                              | 32.1                           | 46.7                                  |
| West                        | 22.7                              | 20.4                           | 17.0                                  |
| Received firearms training  | 93.4                              | 44.0                           | 83.8                                  |
| Average age (years)         | 42.0                              | 45.7                           | 50.1                                  |

Note: Non-owning group also excludes nonowners who have recreational use over past 12 months

## Number of Households with Gun Accidents

|   | Rate Per 1,000 | Thousands |
|---|----------------|-----------|
| Gun accident during past 12 months                        | 3.2            | 315       |
| Gun accident to child age <18 years during past 12 months | 0.5            | 46        |

Note: Thirteen respondents reported an accident (row 1), and two respondents reported an accident to a child (row 2).

shoots another while fooling with a gun he thought was not loaded? In practice, the difficulty of classification is greatly compounded by the problem of obtaining an accurate report of what happened.

The number of accidental deaths is known with greater precision than the number of nonfatal woundings simply because deaths are almost always known and investigated by the medical examiner and police. On the other hand, woundings may go unnoticed by officials, or if known may nonetheless go uninvestigated and unrecorded. For example, Annest et al. (1995) used data from emergency-room records to estimate that there were 99,000 nonfatal woundings each year, but this estimate misses cases that were not treated in emergency rooms, and does not distinguish between accidental and intentional woundings.

Gaining a reliable estimate of the number of accidental gunshot wounds is hence of considerable interest. Unfortunately, however, the NSPOF does not support a reliable estimate, as explained below.

#### Gun Accidents in the NSPOF

The NSPOF asked each participant, "In the past 12 months, have you or anyone in your household been a victim of an accidental gunshot wound?" Since the question refers to all household members, this is one of the rare instances in this report in which we employ the household weights to produce our estimates.

Based on reported accidents, we estimate that a member of one-third of one percent of U.S. households was accidentally wounded in 1994. That estimate is based on just 13 respondents in the NSPOF sample of 2,568. Using the NSPOF sampling weights, these very small proportions imply a large (in an absolute sense) number of accidents: 315,000 per year (Table 5.7). The standard error for this estimate is 160,000, which implies a rather wide range of statistically plausible values.

The uncertainty about this estimate stems not only from sampling error, but also from the accuracy of reports by respondents (Table 5.8). Possible sources of error include "telescoping"

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of one-third
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though [this]
estimate is
based on
just 13
respondents...

## **Gun Accidents Reported in NSPOF**

| Vict | im                      | Age | Sex | Education   | Income<br>(Thousands) | Part<br>of<br>Body<br>Wounded | Where<br>Accident<br>Took<br>Place | Circum-<br>stances<br>of<br>Accident        | Type<br>of<br>Gun<br>Involved |
|------|-------------------------|-----|-----|---|-----------------------|-------------------------------|------------------------------------|---|-------------------------------|
| 1.   | Respondent              | 81  | М   | <hs< th=""><th>0–5</th><th>Leg/<br/>feet</th><th>Other</th><th>Accident/<br/>negligence</th><th>Revolver</th></hs<>                                       | 0–5                   | Leg/<br>feet                  | Other                              | Accident/<br>negligence                     | Revolver                      |
| 2.   | Other family/<br>parent | 39  | F   | <hs< td=""><td>?</td><td>Head/<br/>neck</td><td>Someone's<br/>home</td><td>Scuffling<br/>for possession<br/>of gun</td><td>Semi-auto<br/>rifle</td></hs<> | ?                     | Head/<br>neck                 | Someone's<br>home                  | Scuffling<br>for possession<br>of gun       | Semi-auto<br>rifle            |
| 3.   | Other family/<br>parent | 30  | М   | COL +   | 75 +                  | Chest                         | Outdoors                           | Accident/<br>negligence                     | Revolver                      |
| 4.   | Other family/<br>parent | 25  | F   | HS  | 20–30                 | Torso/<br>not<br>chest        | Someone's<br>home                  | Target<br>practice/<br>shooting<br>at birds | Don't<br>know                 |
| 5.   | Respondent              | 24  | М   | HS  | 10–15                 | Head/<br>neck                 | Outdoors                           | Drive-by shooting                           | Semi-auto<br>handgun          |
| 6.   | Other family/<br>parent | 37  | F   | HS  | 0–5                   | Head/<br>neck                 | Someone's<br>home                  | Other                                       | Revolver                      |
| 7.   | Respondent              | 34  | F   | <hs< td=""><td>0–5</td><td>Hands/<br/>arms</td><td>R's home</td><td>Accident/<br/>negligence</td><td>Semi-auto<br/>handgun</td></hs<>                     | 0–5                   | Hands/<br>arms                | R's home                           | Accident/<br>negligence                     | Semi-auto<br>handgun          |
| 8.   | Other family/<br>parent | 20  | F   | <col< td=""><td>15–20</td><td>Leg/<br/>feet</td><td>Outdoors</td><td>Other</td><td>Don't<br/>know</td></col<>   | 15–20                 | Leg/<br>feet                  | Outdoors                           | Other                                       | Don't<br>know                 |
| 9.   | Respondent              | 30  | М   | <hs< td=""><td>0–5</td><td>Leg/<br/>feet</td><td>Other</td><td>Drive-by<br/>shooting</td><td>Semi-auto<br/>rifle</td></hs<>                               | 0–5                   | Leg/<br>feet                  | Other                              | Drive-by<br>shooting                        | Semi-auto<br>rifle            |
| 10.  | Young child (<18)       | 36  | М   | <hs< td=""><td>30–50</td><td>Leg/<br/>feet</td><td>Outdoors</td><td>Other</td><td>Semi-auto<br/>handgun</td></hs<>  | 30–50                 | Leg/<br>feet                  | Outdoors                           | Other                                       | Semi-auto<br>handgun          |
| 11.  | Respondent              | ?   | F   | ?   | ?                     | Other                         | Outdoors                           | Other                                       | Don't know                    |
| 12.  | Other family/<br>parent | 19  | М   | <hs< td=""><td>?</td><td>Chest</td><td>R's yard</td><td>Other</td><td>Handgun<br/>(DK type)</td></hs<>  | ?                     | Chest                         | R's yard                           | Other                                       | Handgun<br>(DK type)          |
| 13.  | Young child<br>(<18)    | 34  | F   | HS  | 30–50                 | Head/<br>neck                 | Someone's<br>home                  | Cleaning/<br>oiling/<br>repairing gun       | Other<br>rifle                |

R = Respondent.

(reporting an event that occurred more than a year ago), and failure to report an accident that did occur in the yearlong window (perhaps due to the respondent's unwillingness to divulge an event in which he was implicated). Respondents may also misclassify as unintentional incidents that would be considered intentional by law enforcement authorities (for example, 2 of the 13 events were drive-by shootings). In general a survey of this sort is a problematic device for measuring a rare event. We return to this matter in greater detail in the next chapter's discussion of defensive gun uses.

For what it is worth, we note that the 13 respondents who reported accidents do not represent a cross section of gunowning households. Of these 13, 11 are either black or Hispanic, and most are of less-than-average income and education. With only one clear exception, the accidents did not result from hunting or target shooting. Seven of the 10 guns that respondents could identify by type were handguns. Most of the accidents did not occur in the respondent's home.

## **Gun Carrying**

Carrying a gun away from home, especially in an urban area, is problematic because it places the public at risk if the carrier is reckless or criminal. For that reason, carrying a gun in a vehicle or especially on one's person is subjected to a variety of state and local regulations. In particular, carrying a concealed gun is generally prohibited

by state laws except in the case of law enforcement officers and (in many states) those who have obtained a special license. The effects (positive and negative) of legislation that increases the ability of citizens to carry concealed firearms are the topic of ongoing debate (McDowall, Loftin, and Wiersema 1995; Polsby 1995), but a number of states have enacted such legislation within the last few years.

## Gun Carrying in the NSPOF

The NSPOF data provide two separate opportunities to examine gun-carrying behavior among the adult population. First, as discussed earlier in the report, the NSPOF survey explores the characteristics, acquisition, and uses of one gun that is randomly selected from among each gun-owning respondent's stock. One of the questions asked of each respondent is "Where do you usually keep this gun?" with two of the possible response categories given by "with you, on you" and "in car, truck." Thus, analysis of NPSOF data allows us to estimate the proportion of the gun stock (and separately of the handgun stock) that is "usually" carried, and to distinguish between guns that are carried directly on the owners from those that are stored in motor vehicles. Second, the NSPOF also contains a series of questions directly concerning gun carrying for protection. Respondents are asked whether the gun carrying was in connection with their work, how many days during the past year they carried a gun, whether they

Carrying a gun away from home, especially in an urban area, is problematic because it places the public at risk if the carrier is reckless or criminal.

## **Number of Guns Carried Regularly**

| How<br>Carried              | Males<br>(N=562) | Females<br>(N=168) | Total<br>(N=730) |
|-----------------------------|------------------|--------------------|------------------|
|                             |                  | Percent            |                  |
| Guns carried regularly:     |                  |                    |                  |
| On person or in vehicle     | 15.9             | 18.4               | 16.4             |
| On person                   | 9.8              | 4.3                | 8.7              |
| In vehicle                  | 6.1              | 14.1               | 7.7              |
|                             |                  | Millions           |                  |
| Handguns carried regularly: |                  |                    |                  |
| On person or in vehicle     | 7.8              | 2.3                | 10.0             |
| On person                   | 4.8              | 0.5                | 5.3              |
| In vehicle                  | 3.0              | 1.7                | 4.7              |

The NSPOF data provide two separate opportunities to examine gun-carrying behavior among the adult population.

carried the gun on their person or in a motor vehicle, and exactly what type of gun they carried for protection.

Table 5.9 contains our estimates for the proportion of the handgun stock that is regularly kept on the respondent or in the respondent's car—that is, "carried." We estimate that 10 million handguns, one-sixth of the total stock, are regularly carried, half on the person and half in a vehicle. An additional half million long guns are carried regularly.

The second approach to measuring the prevalence of carrying is probably of greater interest, since it provides a better sense of how many people carry guns, and allows us to focus on those who carry firearms (at least occasion-

ally) for the purpose of self-protection. Tables 5.10 and 5.11 report the results. About 14.2 million adults carried a gun for protection at least once during the 12 months preceding the survey—9.8 million men and 4.4 million women. Four million of these indicated that they carried a gun for protection "in connection with work." Two-thirds of those who carried a gun kept it in their vehicles, while the others sometimes carried it on their persons.

The occupations for respondents who reported carrying a gun in connection with work were quite diverse. Somewhat surprisingly, only a quarter of this group was employed in the protective service field. The executive/managerial,

## **Prevalence of Gun Carrying**

| Why and How Carried      | Males<br>(N=1,182) | Females<br>(N=1,380) | All Adults<br>(N=2,563) |
|--------------------------|--------------------|----------------------|-------------------------|
|                          |                    | Percent              |                         |
| Gun carried:             | 10.9               | 4.4                  | 7.5                     |
| Related to work          | 3.3                | 1.1                  | 2.1                     |
| Not related to work      | 7.6                | 3.3                  | 5.4                     |
| On person                | 1.8                | 0.3                  | 1.0                     |
| In vehicle               | 4.7                | 2.5                  | 3.6                     |
| On person and in vehicle | 1.1                | 0.4                  | 0.8                     |
|                          |                    | Millions             |                         |
| Gun carried regularly:   | 9.8                | 4.4                  | 14.2                    |
| Related to work          | 3.0                | 1.0                  | 4.0                     |
| Not related to work      | 6.9                | 3.3                  | 10.2                    |
| On person                | 1.6                | 0.3                  | 1.9                     |
| In vehicle               | 4.2                | 2.5                  | 6.7                     |
| On person and in vehicle | 1.0                | 0.4                  | 1.5                     |

professional specialty, and transportation/material-moving occupations each accounted for 10 percent. Whether respondents were formally required by their employers to carry firearms as part of their occupational duties, or if instead they carry guns on their own initiative because of perceived danger, is not clear from the survey data. In any event, we estimate that 3 million adults who were not in law enforcement or security carried firearms for protection on the job.

Table 5.11 analyzes gun carrying that is not related to work. The majority of those who carry do so less than

30 days per year, but a substantial minority rarely leaves home without a gun. The guns in question are almost always handguns (93 percent).

Some correlates of gun carrying (not shown in the tables) are worth noting. Males who have carried guns over the past year are about two and one-half times as likely to have been arrested for a nontraffic offense as other men (15 percent versus 6 percent). And a disproportionate share of gun carriers reside in the South, where the prevalence of carrying is almost double that of the rest of the nation.

About
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for protection
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during the
12 months
preceding
the survey—
9.8 million
men and
4.4 million
women.

## Frequency of Gun Carrying Not Related to Work

|  | Percent Distribution |
|--|----------------------|
| Number of days in past 12 months                                       |                      |
| gun carried on person: (N=61)  | 07.5                 |
| 0–7  | 37.5                 |
| 8–30   | 18.2                 |
| 31–179   | 13.2                 |
| 180–365  | 31.2                 |
| Every day  | 21.5                 |
| Average number of days in past 12 months gun carried on person         | 124 days             |
| Number of days in past 12 months gun carried in motor vehicle: (N=133) |                      |
| 0–7  | 44.3                 |
| 8–30   | 18.3                 |
| 31–179   | 8.8                  |
| 180–365  | 26.7                 |
| Every day  | 17.5                 |
| Average number of days in past 12 months                               |                      |
| gun carried in motor vehicle   | 99.9 days            |

# VI

# DEFENSIVE Gun Uses

#### Introduction

The annual number of defensive gun uses (DGUs) is frequently invoked as a measure of the benefits of private gun ownership. It is typically compared to the costs as measured by the number of violent crimes committed with a firearm each year. The National Crime Victimization Survey (NCVS) provides a relatively uncontroversial estimate of the number of gun crimes—1.3 million in 1994 (BJS 1996). The NCVS also provides estimates of the number of DGUs, recently averaging about 65,000 per year (McDowall and Wiersema 1994). But other surveys provide a basis for far-higher estimates (Kleck 1988). The most recent and noteworthy estimate of the number of DGUs is 2.5 million per year, based on data from a nationally representative telephone survey conducted explicitly for this purpose (Kleck and Gertz 1995). The 2.5 million figure has been picked up by the press and now appears regularly in newspaper articles, letters to the editor, and editorials, and even in Congressional Research Service briefs for public policymakers.

The NSPOF survey is quite similar to that conducted by Kleck and Gertz (1995), and provides a basis for replicating their estimate. The NSPOF data indicate that in 1994 at least 1.5 million adults used a gun defensively against another person, a figure that is much closer to Kleck and Gertz's 2.5 million figure than to the NCVS-based estimates. Further, many of the NSPOF respondents who indicated a DGU in the preceding year said that they had also used their gun defensively on one

The NSPOF data indicate that in 1994 at least 1.5 million adults used a gun defensively against another person... or more other occasions. Taking account of these multiple reporters, the NSPOF data suggest that from 4 to 23 million DGUs occurred in 1994 (depending on which definition of a DGU is used).

Our discussion of these results focuses on two issues. The first is whether they are credible. Respondents who reported a DGU were asked a number of questions about the circumstances and results of their action. That information provides the basis for estimating a number of statistics for which the true values are known with some degree of accuracy. For example, the NSPOF data imply that there were over 100,000 criminals shot by their victims in 1994. That figure can be compared with estimates from other sources about the number of people treated annually for gunshot wounds in the United States. This and other such comparisons, as well as puzzling inconsistencies in several DGU reports, suggest that the NSPOF data on DGUs is grossly in error.

The second issue we explore is the value of these estimates for the ongoing debate over the public value of private gun ownership. Most commentators have assumed that the DGUs reported by survey respondents are actions that would be endorsed by an impartial observer who knew all the facts. Yet the sketchy and unverified accounts available from surveys leave considerable uncertainty about what actually happened, whether the respon-

dent was the victim or the perpetrator, and whether the respondent's actions were otherwise legal, reasonable, and in the public interest.

We begin by reviewing the previous literature on defensive gun uses in the U.S. The third section presents estimates of DGU incidents based on data from the NSPOF, following the methods used in earlier analyses based on surveys of this sort. The fourth section provides a discussion of the results.

# How Many Defensive Gun Uses? Previous Findings

Previous estimates of the number of DGUs come from surveys of nationally representative samples. Here we review the results from the National Crime Victimization Survey (NCVS), and then from several telephone surveys conducted by private polling firms.

#### **NCVS-Based Estimates**

The NCVS is conducted by the Census Bureau for the U.S. Bureau of Justice Statistics, and involves in-person interviews with every person age 12 and above in a nationally representative sample of 56,000 households. Each household is interviewed once every six months, and households are retained in the sample for seven interviews over the course of three years. The NCVS asks respondents who have been the victim of a crime in the preceding six months whether they "did or tried to do [anything] about the in-

Most commentators bave assumed that... [defensive gun uses] are actions that would be endorsed by an impartial observer who knew all the facts.

cident while it was going on?" If so, respondents are asked to describe their actions; among the possible response codes are "attacked offender with gun; fired gun" and "threatened offender with gun."

In research based on the NCVS, DGUs have been defined as those instances for which the respondent reported resisting by either attacking the offender with the gun or threatening to do so. The following estimates of the annual DGU count have been published:

| NCVS<br>Estimate | Circumstances                                  | Source                           |
|------------------|--|----------------------------------|
| 68,000           | Assault and robbery, 1979–85                   | Kleck (1988)                     |
| 80,000           | All violent crimes<br>and burglary,<br>1979–87 | Cook (1991)                      |
| 65,000           | All violent crimes<br>and burglary,<br>1987–90 | McDowall<br>& Wiersema<br>(1994) |

The reliability of NCVS-based estimates has been questioned by Kleck and Gertz (1995, 154–5), who developed several arguments for why the NCVS may understate the true count. Below, we evaluate some of the issues they raise. For now it is sufficient to note that the NCVS is the "gold standard" of criminal victimization surveys in terms of such criteria as sample size, response rate, and methodological sophistication. Estimates of DGUs based on the NCVS cannot be lightly dismissed. On the other hand, the arguments by Kleck and Gertz deserve close attention.

## Previous Telephone Survey-Based Estimates

From 1976 to 1994, various one-shot commercial surveys have included questions about DGUs, though none of the surveys were designed exclusively to examine this issue (Kleck and Gertz 1995, 157). The surveys differ along various dimensions: sample population (non-institutionalized adults versus registered voters, national samples versus citizens from a particular state); whether the DGU questions were asked of all survey participants, or only those who met specific criteria such as gun ownership; whether a distinction was made between uses against animals and uses against people; and the time period over which respondents were asked to recall defensive gun uses (lifetime, past five years, or past one year).

Kleck and Gertz (1995, 182–183) compute the number of defensive gun uses against people suggested by each of these studies. The estimates range from 770,000 to 3.6 million defensive gun uses per year. They focus attention on two of the surveys which, they suggest, are of particularly high quality. The 1981 survey by Hart Research Associates "implied a minimum of about 640,000 annual DGUs involving handguns... (p. 158)." Extrapolating the Hart handgun estimates to all gun uses, they estimate 1.8 million defensive gun uses per year.

The most recent telephone survey was conducted by Kleck and Gertz (1995, 161) explicitly for the purpose of

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victimization

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response

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cal sophisti
cation...

...a series of one-shot commercial telephone surveys of... [defensive gun uses] bave produced estimates that are one or two orders of magnitude larger than those produced using ... National Crime Victimization Survey data.

estimating the annual incidence of defensive gun uses. Kleck and Gertz oversampled males in the South and West regions in order to produce an acceptably large number of DGUs, and weighted the data to generate nationally representative population estimates (161). A total of 4,977 households were contacted in the Kleck and Gertz survey, of which 1,832 cases completed the full questionnaire—all respondents reporting a DGU plus a randomly selected third of respondents who did not report a DGU. An additional 3,145 were terminated by Kleck and Gertz's interviewers once it was determined that they had not participated in a DGU.

Kleck and Gertz's DGU question reads as follows (p. 161): "Within the past five years, have you yourself or another member of your household used a gun, even if it was not fired, for self-protection or for the protection of property at home, work, or elsewhere? Please do not include military service, police work, or work as a security guard" [emphasis in original]. Respondents answering in the affirmative were then asked whether the DGU was used to protect against an animal or person, and also to provide the number of DGUs in which the respondent was involved over the past five years.

From the sample of almost 5,000 adults, 244 respondents indicated some kind of defensive gun use over the past five years. Of this group, 22 (9 percent) indicated the most recent defensive gun use was against an animal.

The DGU estimates were standardized to show the estimated number of DGUs against humans that did not involve actions by police, military, or protective service personnel acting in the line of duty. Kleck and Gertz (1995, 162–63) applied additional, more stringent, criteria in producing their own estimates for the annual number of "genuine" DGUs, as follows:

- (1) The defensive use "involved actual contact with a person, rather than merely investigating suspicious circumstances";
- (2) "The defender could state a specific crime which he thought was being committed at the time of the incident";
- (3) The respondent "used" the gun ("at a minimum it had to be used as part of a threat against a person, either by verbally referring to the gun ... or by pointing it at an adversary").

Incidents that met all these criteria were used to calculate what they termed *A*-type estimates for one- and five-year prevalence. Kleck and Gertz also produced more conservative *B* estimates that apply the additional restriction:

(4) The respondent was not employed by the police, military, or protective service industry (regardless of whether the most recent DGU occurred at work), and the record from the interview was complete in all relevant respects.

Kleck and Gertz's *A*-type estimate for the number of adults involved in a DGU during the previous year is the well-known 2.5 million. Their *B*-type estimate is 2.2 million.

In sum, a series of one-shot commercial telephone surveys of DGUs have produced estimates that are one or two orders of magnitude larger than those produced using the NCVS data. In the next section, we use the NSPOF to develop estimates for the number of defensive gun uses and users as a first step in attempting to resolve this discrepancy.

## How Many Defensive Gun Uses? NSPOF-Based Estimates

#### **DGU Questions in the NSPOF**

Each of the 2,568 respondents in the NSPOF were asked the question: "Within the past 12 months, have you yourself used a gun, even if it was not fired, to protect yourself or someone else, or for the protection of property at home, work, or elsewhere?" Answers in the affirmative were followed with "How many different times did you use a gun, even if it was not fired, to protect yourself or property in the past 12 months?" [emphasis in original]. Negative answers to the first DGU question were followed by "Have you ever used a gun to defend yourself or someone else?" Respondents who answered yes to either of these DGU questions were then asked a sequence of 30 additional questions concerning the most recent DGU in which the respondent was involved, including the respondent's actions with the gun, the location and other circumstances of the incident, and the respondent's relationship to the perpetrator.

The Chilton interviewers were also asked to provide their own assessment of whether the respondent was inventing the most recent DGU incident.

#### **NSPOF Estimates**

Given that the NSPOF is quite similar to the survey reported in Kleck and Gertz with respect to the instrument, sampling procedure, and interviewing method, we would expect similar results on the number of defensive gun users each year. As it turns out, we find that NSPOF-based estimates of the number of defensive gun users (DGUers) are lower but compatible (in a statistical sense) to those produced by Kleck and Gertz. The NSPOF has an advantage over the Kleck and Gertz survey in that it includes an item on the number of DGUs during the preceding year by those respondents who had at least one; thus we are able to estimate the number of defensive gun uses, which is several times as large as the number of users.

Table 6.1 contains results from the NSPOF on the number of defensive gun users each year. We exclude from our calculations those respondents whom the Chilton interviewers suspected of fabricating the most recent DGU incident. As shown in the table, 54 respondents reported a defensive gun use during the past 12 months, which

The NSPOF...
includes...
the number of
...[defensive
gun uses]
during the
preceding
year by those
respondents
who had at
least one...

## **Defensive Gun Uses Reported for Preceding 12 Months**

| Definition (Cumulative Exclusions)   | Percent | Millions |
|--|---------|----------|
| Total (N=54)   | 1.93    | 3.67     |
| Exclude if against animals (N=45)  | 1.64    | 3.12     |
| Exclude if military use (N=38)   | 1.44    | 2.73     |
| Exclude if no report of specific crime (N=37)                                    | 1.29    | 2.45     |
| Exclude if no report of specific use of gun (N=26)                               | 0.95    | 1.81     |
| Exclude if did not see perpetrator (N=19)  | 0.77    | 1.46     |
| Exclude if work-related DGU (even if not military/protective service job) (N=18) | 0.75    | 1.43     |

...almost
balf of
respondents
[who reported
a defensive
gun use]
reported
multiple
DGUs over
the past year;
one woman
reported 52
DGUs.

projects to 3.7 million adults. A majority of these may be excluded for the reasons indicated, as in Kleck and Gertz (see above). In what follows, we use several operational definitions of DGU, with different sets of the above exclusions.

Table 6.2 provides a variety of estimates of the number of DGUers and DGUs. The first row includes all NSPOF respondents who reported a DGU against a person. There were 45 such respondents for the preceding year, representing 3.12 million adults, or 1.64 percent of the adult population. As it turns out, almost half of these respondents reported multiple DGUs over the past year; one woman reported 52 DGUs. Incorporating the information on the

*number of* DGUs in the preceding year provides the basis for estimating the population total, which turns out to be 23 million.

There were 112 respondents who reported at least one DGU against a person during the previous *five* years. They represent 7.8 million adults, or 4.1 percent of the population (plus or minus 0.6 percent).

In the third column of Table 6.2, we apply the Kleck and Gertz (1995) criteria for "genuine" DGUs (type *A*), leaving us with just 19 respondents. They represent 1.5 million defensive users. This estimate is directly comparable to the well-known Kleck and Gertz estimate of 2.5 million, shown in the last

#### Defensive Gun Use, One- and Five-Year-Recall Period

|  | AII<br>NSPOF | Selected<br>NSPOF Cases<br><i>A</i> -Type | Kleck and<br>Gertz<br><i>A</i> -Type |
|--|--------------|---|--------------------------------------|
| 1 year   | (N=45)       | (N=19)                                    | (N=66)                               |
| Defensive gun users (millions)                 | 3.12         | 1.46                                      | 2.55                                 |
| Defensive gun users (as percent of population) | 1.64         | 0.77                                      | 1.33                                 |
| Defensive gun uses (millions)                  | 23.0         | 4.7                                       | 2.6                                  |
| 5 years  | (N=113)      | (N=51)                                    | (N=165)                              |
| Defensive gun users (millions)                 | 7.87         | 3.23                                      | 6.37                                 |
| Defensive gun users (as percent of population) | 4.14         | 1.70                                      | 3.32                                 |
| Standard error                                 | (0.56)       | (0.36)                                    |                                      |

Note: In Kleck and Gertz's 1995 DGU study, A-type estimates meet certain criteria. See text for explanation.

column. While ours is smaller, it is statistically plausible that the difference is due to sampling error. Note that when we include the multiple DGUs reported by half our 19 respondents, our estimate increases to 4.7 million DGUs.

#### **Circumstances and Outcomes**

While the NSPOF includes a number of items on the circumstances and outcomes of each DGU, our exploration is limited by the small sample size. We focus on the 85 respondents who report a civilian DGU against a person during the past 5 years.

As shown in Table 6.3, 60 percent of DGUs occurred in or near the victim's home. As shown in Table 6.4, half of

the DGUs involved more than one perpetrator; in most cases (69 percent), the perpetrator(s) were strangers to the victim.

Handguns were used by defenders in about three-quarters of these incidents, and in over 40 percent of defensive uses the gun had been kept either directly on the respondent or in the respondent's vehicle, as shown in Table 6.5. Usually the victim confronted the perpetrator with a loaded gun. In the cases in which the gun was not already loaded (27 percent), most respondents proceeded to load the gun before facing the perpetrator. In 15 percent of the cases, the gun that was used in the defense did not belong to anyone in the respondent's household.

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or in the
respondent's
vehicle...

# Circumstances of Defensive Gun Use Against Humans, Previous Five Years\*

| NSPOF Question                                       | Percent Distribution |
|--|----------------------|
| Where did the defensive gun use take place? (N=82)   |                      |
| Inside respondent's home                             | 18.2                 |
| Near respondent's home                               | 41.5                 |
| In/near friend/relative's home                       | 13.7                 |
| At or near work                                      | 3.8                  |
| Commercial place (bar, gas station, shopping center) | 7.2                  |
| Parking lot/garage                                   | 8.2                  |
| Street/public transportation                         | 6.3                  |
| Other  | 1.1                  |

<sup>\*</sup>Excluding Law Enforcement.

# Characteristics of Perpetrator in Defensive Gun Use Against Humans, Previous Five Years\*

| NSPOF Question   | Percent Distribution |
|--|----------------------|
| Did respondent see person defending against? (N=83)      |                      |
| Yes  | 77.6                 |
| How many people was respondent defending against? (N=67) |                      |
| 1  | 49.5                 |
| 2  | 16.3                 |
| 3 or more  | 34.2                 |
| Respondent's relationship to perpetrator: (N=84)         |                      |
| Stranger   | 68.9                 |
| Friend/relative  | 17.0                 |
| Boy/girl friend (current or ex)                          | 14.1                 |

<sup>\*</sup>Excluding Law Enforcement.

## Characteristics of Gun in Defensive Gun Use Against Humans, Previous Five Years\*

| Characteristic   | Percent Distribution |
|--|----------------------|
| Type of gun in defensive gun use: (N=81)   |                      |
| Handgun  | 75.7                 |
| Long gun   | 22.3                 |
| Other  | 2.0                  |
| Owner of gun in defensive gun use: (N=84)  |                      |
| Respondent   | 68.7                 |
| Someone in respondent's household  | 16.1                 |
| Someone out of respondent's household  | 15.2                 |
| When respondent first wanted to use gun for protection, where was gun stored? (N=79) |                      |
| Bedroom  | 30.2                 |
| Gun cabinet  | 16.4                 |
| Other closet   | 6.6                  |
| Other household location   | 5.6                  |
| With/on respondent   | 22.3                 |
| In car/truck   | 18.7                 |
| Was gun already loaded? (N=82)   |                      |
| Yes  | 72.7                 |
| No, but respondent loaded gun during confrontation                                   | 22.1                 |
| No   | 5.2                  |

<sup>\*</sup>Excluding Law Enforcement.

As shown in Table 6.6, the defender fired his or her gun in 27 percent of these incidents (combined "fire warning shots" and "fire at perpetrator" percentages, though some respondents reported firing both warning shots and aiming at the perpetrator). Forty percent of these were "warning shots," and about a third were aimed at the perpetrator but missed. The perpetrator was wounded by the crime victim in eight percent of all DGUs. In nine percent

of DGUs the victim captured and held the perpetrator at gunpoint until the police could arrive.

The perpetrator was armed in 40 percent of these cases. Half of armed perpetrators had a gun, and in 30 percent of the cases in which the perpetrator had a gun (6 percent of the total) the victim reported having been fired upon. In 45 percent of DGUs the respondents believed that they or someone else would

The perpetrator was wounded by the crime victim in eight percent of all ...[defensive gun uses].

# Circumstances and Outcomes of Defensive Gun Use Against Humans, Previous 5 Years\*

|   | Percent Distribution |
|---|----------------------|
| Did perpetrator know respondent had gun? (N=79)                                       |                      |
| Yes   | 55.2                 |
| What did respondent do in the defensive gun use? (N=85)                               |                      |
| Tell perpetrator respondent had gun   | 37.2                 |
| Show gun to perpetrator   | 68.7                 |
| Point gun at perpetrator  | 32.4                 |
| Use gun as club to strike   | 1.4                  |
| Fire warning shots  | 15.8                 |
| Fire at perpetrator   | 15.7                 |
| Capture perpetrator, hold until police arrive   | 9.4                  |
| Wound/kill perpetrator  | 8.0                  |
| What would have happened if respondent had not used gun? (N=79)                       |                      |
| Improved situation  | 7.7                  |
| Made no difference  | 20.5                 |
| Made situation worse  | 71.7                 |
| How likely that someone would have been killed if respondent had not used gun? (N=76) |                      |
| Very unlikely   | 29.0                 |
| Somewhat unlikely   | 25.6                 |
| Likely  | 11.4                 |
| Somewhat likely   | 15.5                 |
| Very likely   | 18.5                 |

<sup>\*</sup>Excluding Law Enforcement.

Continued

## Continued

|   | Percent Distribution |
|---|----------------------|
| Did perpetrator threaten, attack, injure respondent? (N=85) |                      |
| None of these   | 46.1                 |
| Threatened only   | 26.9                 |
| Attacked/not injured  | 10.4                 |
| Attacked and injured  | 16.6                 |
| Who was first to attack with physical force? (N=17)         |                      |
| Respondent  | 3.8                  |
| Perpetrator   | 89.1                 |
| Someone else  | 7.1                  |
| Did perpetrator have weapon? (N=84)                         |                      |
| Yes   | 39.5                 |
| No  | 45.3                 |
| Don't know  | 15.2                 |
| What kind of weapon did perpetrator have? (N=38)            |                      |
| Gun   | 49.5                 |
| Knife/sharp object  | 31.5                 |
| Blunt/other object  | 16.5                 |
| Don't know  | 2.4                  |
| Did perpetrator shoot at you/someone else? (N=21)           |                      |
| Yes   | 30.2                 |
| Did perpetrator get away with money/property? (N=40)        |                      |
| Yes   | 11.8                 |
| Do the police know about this incident? (N=84)              |                      |
| Yes   | 52.9                 |

have been killed by the perpetrator had they not used a gun in self-defense.

The police were informed about the incident in slightly over half of these cases.

#### **Defensive Gun Users**

Table 6.7 presents descriptive statistics for three distinct groups: the 85 respondents who reported a defensive gun use against a human during the past five years; gun owners who have never reported a DGU; and those respondents who did not own a gun. In comparison with gun owners, proportionately more DGUers are female, minority, unmarried, and living in an urban area. These findings are all consistent with earlier studies of DGU reporters (Kleck and Gertz 1995, 178–9).

Defensive gun users tend to be young—half under 35, which is nine years below the average age for other gun owners. DGUers are also two and one-half times as likely as other gun owners to have been arrested for a nontraffic offense, and four times as likely to have been arrested as adults who do not own a gun.

A more detailed description of DGUers is not possible due to the small sample size.

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# Resolving the NCVS-NSPOF Discrepancy

# Can It Be? Some Troubling Implications

If these numbers are credible, we are led to conclude that millions of attempted assaults and thefts are foiled each year by armed citizens. Further, guns are used far more often to defend against crime than to perpetrate crime. On the other hand, if we reject these estimates in favor of those based on NCVS data, the reverse is true. It is thus of considerable interest and importance to check the reasonableness of the NSPOF estimates before embracing them.

As a guide to how to proceed, we note Max Singer's discussion of "mythical numbers": "The main point of this article may well be to illustrate how far one can go in bounding a problem by taking numbers seriously, seeing what they imply, checking various implications against each other and against general knowledge (such as the number of persons or households in the city). Small efforts in this direction can go a long way to help ordinary people and responsible officials to cope with experts of various kinds" (Singer 1971, 9). In this section we follow Singer's advice, comparing some of the estimates from the NSPOF against other statistics. The results suggest that the DGU estimates are far too high.

We begin by noting that if only a small fraction of violent crimes result in self-defense with a gun (an uncontroversial assumption) then the number of DGUs will necessarily be much less than the number of violent crimes. Table 6.8 presents some implications of the NSPOF estimates for annual DGUs. The NSPOF estimates suggest that 130,000 criminals are wounded or killed by

[Defensive gun users are] ...two and onebalf times as likely as other gun owners to bave been arrested for a nontraffic offense, and four times as likely to bave been arrested as adults who do not own a gun.

## Demographic Characteristics of Gun Owners, Defensive Gun Users, and Non-Owners

| Characteristic  | Gun Owners<br>Who Have<br>Never Had<br>DGU<br>(N=644) | DGUs,<br>Last 5 Years,<br>Excluding Law<br>Enforcement<br>(N=85) | Non-Gun<br>Owners Who<br>Have Never<br>Had DGU<br>(N=1,576) |
|---|---|--|---|
|   |   | Percent Distribution   |   |
| Sex:  |   |  |   |
| Male  | 79.9  | 58.8   | 35.4  |
| Female  | 20.1  | 41.2   | 64.6  |
| Race:   |   |  |   |
| White   | 86.0  | 63.4   | 77.2  |
| Black   | 7.3   | 22.2   | 13.2  |
| Other   | 6.7   | 14.4   | 9.6   |
| Age:  |   | <u>.</u>   |   |
| 18–34   | 29.0  | 54.4   | 37.0  |
| 35 and over   | 70.3  | 43.8   | 60.7  |
| Average age   | 45.8  | 36.3   | 44.0  |
| Marital Status:   |   |  |   |
| Married   | 73.8  | 48.5   | 61.5  |
| Widowed   | 3.8   | 1.0  | 6.9   |
| Divorced/Separated  | 7.9   | 18.5   | 10.0  |
| Never married   | 14.6  | 32.1   | 21.7  |
| Community:  |   |  |   |
| Rural   | 28.3  | 28.7   | 13.4  |
| Small town/city   | 34.0  | 26.8   | 31.2  |
| Medium city   | 11.8  | 13.3   | 17.4  |
| Suburbs of large city   | 9.8   | 7.3  | 15.9  |
| Large city  | 16.2  | 24.0   | 22.1  |
| Income (thousands):   |   |  |   |
| \$0-30  | 34.8  | 43.9   | 35.7  |
| \$30 and over   | 65.2  | 56.1   | 54.4  |
| Don't know/ missing   | 8.4   | 16.2   | 16.0  |
| Children under 18 in household<br>Respondent has ever been arrest | 36.8<br>ted   | 44.2   | 46.9  |
| for nontraffic offense  | 7.8   | 20.5   | 4.9   |

Source: U.S. Bureau of the Census estimates from Statistical Abstract of the United States 1995.

Note: "DGUs" are those who report at least one defensive gun use against a person during the preceding five years, not including on-the-job DGUs by law enforcement officers or protective service workers. Column categories are mutually exclusive; DGUs that do not own firearms are excluded from third column.

## Defensive Gun Use Compared to Total Crime Counts

| Crime                 | NSPOF DGUs<br>by Crime<br>Type<br>(Thousands) | NCVS Estimate<br>of Crime Count,<br>1994<br>(Thousands) | Implied<br>"Defense<br>Rate"<br>(Percent) |
|-----------------------|---|---|---|
| Rape + Attempted Rape | 322   | 316   | 102                                       |
| Assault               | 834   | 9,128   | 9   |
| Aggravated Assault    | 462   | 2,478   | 19  |
| Robbery               | 466   | 1,299   | 36  |

...the total number of people people nonfatally shot by a firearm nationwide and treated in an emergency room or bospital is about 100,000...

civilian gun defenders. In contrast, estimates based on data from publichealth surveillance systems suggest that the total number of people nonfatally shot by a firearm nationwide and treated in an emergency room or hospital is about 100,000 (Annest et al. 1995). That figure includes assaults, accidents, and suicide attempts. Adding an additional 16,000 who are shot and killed in assaults still leaves us short of the estimate from the NSPOF for the number of people shot just in self-defense! Thus if the NSPOF results are correct, it must be true that most perpetrators who are shot during a criminal encounter never receive emergency room treatment for their wounds, and, incidentally, never become known to

law enforcement. We find that possibility rather unlikely.

As seen in Table 6.9, the NSPOF data also imply that as many as 630,000 lives are saved each year by defensive gun uses. By comparison, there were 22,076 people murdered in 1994 (FBI 1995, 18). Since the number of homicides is generally regarded as accurate, we can only think of two explanations to reconcile these two statistics, the first of which is absurd: (1) victims of serious (potentially lethal) criminal attacks have firearms available and successfully ward off their attackers in about 97 percent of all cases or (2) the NSPOF estimates of the number of lives saved, if not the DGU estimates themselves, are greatly exaggerated.

#### Defensive Gun Use Reports: Lives Saved

|   | Thousands |
|---|-----------|
| How likely that someone would have been killed had gun not been used defensively? |           |
| "Very likely"   | 57        |
| "Somewhat likely"   | 322       |
| "Likely"  | 250       |
| Total number of lives saved   | 629       |
| Total number of homicides saved (1994)*   | 21        |
| Implied successful defense rate**   | 97%       |

<sup>\*</sup>Homicide estimates for 1994 taken from FBI's Uniform Crime Reports (1995, 18).

The evidence of positive bias in the DGU estimates is still stronger when we recall that the DGU estimates are calculated using only the most recently reported DGU incidents of NSPOF respondents. As we have seen, about half of the respondents who reported a DGU indicated that there had been two or more in the preceding year. While we have no details on the circumstances of those additional DGUs, presumably if the respondents had been asked they would have reported additional violent crimes, wounded perpetrators, and lethal attacks foiled. The already improbable figures for the number of crimes defended against with a gun could be magnified still farther.

#### **Some Explanations**

With a sample size of 2,568, each NSPOF respondent represents from 70,000 to 80,000 citizens on average using the projection weights discussed earlier. As we have seen, the most recent NCVS-based estimates suggest 65,000 defensive gun uses by citizens against crime each year (McDowall and Wiersema 1995); on the basis of the NCVS figures, we would have expected one respondent from the entire NSPOF sample to have reported a defensive gun use during the past year. Instead, 19 reported at least one DGU that meets our stringent criteria. In this section, we explore possible explanations for these differences.

<sup>\*\*</sup>Implied successful defense rate represents percent of all potentially lethal attacks that are successfully defended by armed victim. Calculated as (A / A + B), with A = number of successful gun defenses by victim in potentially lethal attack (NSPOF estimate), and B = number of homicides (FBI count).

Sequence of Questions. The NCVS asks respondents whether they have been victims of a crime during a specified time, and, if so, whether and what defensive actions were taken during the crime. As a result, the opportunity to discuss a defensive gun use is only made available to NCVS participants if a crime has first been reported. In the NSPOF (as with most telephone surveys), all respondents are asked whether a gun has been used defensively during the indicated period of time.

By construction of our selection criteria, each of the 19 NSPOF respondents indicate that some form of crime was involved in their most recent DGU. A small portion of the discrepancy between the NSPOF and NCVS estimates may be accounted for by the fact that in three cases the most serious crime reported is "trespass," a crime which is not included in the NCVS.

Some of the DGU reporters provide a contradictory account of what happened. In question 72 they are asked "Which of the following best describes what was happening when you used the gun defensively?" They are given nine options, and are permitted to answer "yes" to any number of them. Three responded "yes" to several categories of serious crime (rape, robbery) but also said "yes" to the category "no crime was involved." Another apparent inconsistency appears when we compare the responses to this question with the responses to question 75, "Did the perpetrator

threaten, attack, or injure you?" A total of six respondents who indicated that the circumstance of the DGU was rape, robbery, or attack (question 72) responded "no" to question 75.

The NCVS has a more systematic approach to inquiring about victimization, and some of these DGUers would not have been classified as victims in the NCVS interview. While the NCVS procedures will eliminate some faulty reports of victimization, it may also be true that some respondents will choose not to report crimes that actually occurred.

Survey Environment. The NCVS interviewing environment is different in potentially important ways from that of the one-shot telephone-survey interviews like those of the NSPOF. The NCVS is conducted face-to-face in the respondents' homes. The interviewers identify themselves as federal employees (working for the U.S. Bureau of the Census), and promise that all answers will be kept confidential. In contrast, the NSPOF interviewers identified themselves as from "Chilton Research Services" and conducted all interviews over the telephone without any promise of confidentiality. Which type of interview would respondents trust more?

Our presumption is that some respondents would feel more comfortable speaking with someone in person, especially with the guarantee, but that others would feel more comfortable on the telephone. Kleck and Gertz's (pp. 154–

In the NSPOF...all respondents are asked whether a gun has been used defensively during the indicated period of time.

6) intuition is quite different than ours. They assert that respondents will be far less likely to disclose sensitive information to the NCVS interviewer than to a telephone interviewer who says she is working for a private firm. Kleck and Gertz assert that the commercial telephone surveys produce a much higher prevalence of DGUs than the NCVS precisely because there are many respondents who are unwilling to discuss legally dubious actions with government workers, but are willing to discuss them with a stranger on the telephone. We know of no evidence that would test this conjecture.

In some respects the NCVS is inarguably superior. While the NSPOF has a sample of 2,568, with a response rate of 44 or 59 percent, the NCVS has a sample size of 120,000 in 56,000 housing units, and received responses from residents in 96 percent of targeted households (BJS 1996). Thus, not only is the NCVS expected to provide more reliable estimates due to the sheer size of the sample (that is, NCVS-based estimates are less sensitive to a few aberrant responses), but the differences in response rates also suggest that the NCVS is closer to a truly representative sample of U.S. adults than are telephone surveys.

**Telescoping.** Following the convention in the literature, our estimates focus on the number of defensive gun users and uses during the past year. However, as seen in Table 6.2, dividing the estimates for DGUs and DGUers

using the five-year-recall period produces annual estimates that are dramatically smaller than annual DGU estimates derived from the one-year-recall period (1.46 million versus 648,000, using the conservative count for our most stringent criteria). As seen in the table, this phenomenon is common to other telephone gun surveys (Kleck and Gertz 1995, 165). We would not, of course, expect the five-year-recall period to produce estimates of defensive gun users that are five times as large as the one-year-recall period, given that higher-risk individuals may be victimized several times. At the same time, the observation that the one-year-recall period estimates are twice as large as the annual estimates produced by the five-year recall suggests a problem with respondents' memories. It may be that respondents in the NSPOF include DGUs that occurred more than a year ago in the 12-month-recall question (a phenomenon known as "telescoping"). To the extent to which this occurs, the one-year-recall period will produce overestimates of the number of DGUs each year.

The NCVS guards against this phenomenon by re-interviewing respondents every six months, and using the previous NCVS interview as a benchmark for respondents for the six-month-recall period. The first interview with each NCVS participant is "unbounded," and has been found to produce far larger estimates for the six-month recall than subsequent (bounded) interviews (Cantor 1989).

Our presumption is that some respondents would feel more comfortable speaking with someone in person, especially with the guarantee [of confidentiality], but that others would feel more comfortable on the telephone.

The possibility that some respondents may be confused by the question or about their own experiences is suggested by the rather bigh incidence of mental illness and substance abuse in the United States.

**False Positives.** Prevalence estimates based on interview data are subject to both false negatives (a respondent fails to report a relevant instance) and false positives (where a respondent reports a relevant instance that did not actually occur, or did not occur in the relevant time frame). If the true prevalence is low, as in the case of DGUs, then in a sense there is much greater scope for false positives than false negatives—only a relatively few respondents are logically capable of giving a false negative, whereas anyone who did not use a gun defensively can give a false positive. If the true prevalence is 1/1,000, and the false-positive rate is 2/1,000, then the estimated DGU rate will be at least twice the true level even if none of the true DGUers choose to report their experience (Hemenway 1996).

Is there any reason to believe that some respondents will report DGUs that did not occur? In addition to the telescoping problem discussed above, respondents may falsely report because they are confused, have a distorted memory, or are simply having fun with the interviewer.

Research on survey methodology suggests that respondents have a desire to make themselves "look good" in the eyes of the interviewer (Sudman and Bradburn 1974, 40). Fighting off a criminal attack is (in most circumstances) a heroic act. There may be a temptation for some respondents either to make something up or else to change the details of an actual event. For example,

a survey respondent who had recently heard a bump in the night and checked it out, gun in hand, may report having scared off a trespasser even though in fact he or she did not see anyone at the time.

The possibility that some respondents may be confused by the question or about their own experiences is suggested by the rather high incidence of mental illness and substance abuse in the United States. Recent estimates from the National Institute for Mental Health suggest that 51.3 million American adults aged 18 and over have "one or more mental or addictive disorders" (Bounrdon et al. 1994, 23). Thus, at any point in time a large proportion of American adults are either under the influence of some intoxicant or suffering from a mental disorder, and in either case may be unreliable reporters in a survey. A representative sample of American adults will include these individuals.

An additional source of false positives is strategic behavior by gun advocates. Those who are well informed about the gun-control debate will know that the number of DGUs is relevant and may be tempted to enhance that estimate through their own response to the survey.

The purpose of this discussion is not to claim that every citizen reporting a DGU is mentally impaired or inventing the incident for whatever reason. Rather, our intention is to note that a representative survey of 2,568 Americans that asks questions about any topic will include at least a handful of people who are drunk, have an erratic memory or an axe to grind, or who are just having fun. Given that our estimate of over 4 million defensive gun uses rests on just 19 responses, a handful of false positives would make a big difference.

Of course it is possible that there are also one or more false negatives in this survey. We focus on the problem of false positives because of the logic of estimating rare events, and because we have been persuaded by the evidence offered earlier that the NSPOF estimates overstate the true incidence by a very wide margin.

Finally, while the NSPOF estimate appears too high, that does not imply that the far lower NCVS estimate is correct. The fact that the NCVS only asks DGU questions for those who report a crime eliminates the false-positive problem, but may cause the NCVS to miss DGUers who do not remember or choose not to report the crime. The rather frustrating conclusion is that the available survey data leave considerable uncertainty about the "true" number of DGUs.

## Interpretation of Defensive Gun Use Estimates

The controversy over the frequency with which guns are used in selfdefense is animated by the notion that such uses are vital and virtuous; that is, they have public merit in ways that other private uses of guns (target shooting, hunting) do not (Cook and Moore 1995). The cost of any regulation that will deprive some law-abiding citizens of guns must be reckoned accordingly. If, as suggested by the NSPOF data, it is quite likely that a law-abiding gun owner will have occasion to use the gun in self-defense against a robber or burglar, then the social cost of restricting ownership and use may be substantial. On the other hand, if the likelihood of virtuous self-defense is minute, as suggested by the NCVS data, then we reach quite a different conclusion.

The discussion above has focused on demonstrating that despite a number of surveys that seem relevant, including the NSPOF, we remain highly uncertain about the actual number of genuine DGUs that occur each year. The number that is in wide circulation, 2.5 million, is lower than our best estimate based on a literal interpretation of NSPOF data. But there are numerous reasons, both empirical and conceptual, to believe that this NSPOF estimate is far higher than the underlying reality. The truth eludes this method of measurement, because even a handful of false reports are sufficient to greatly distort the conclusion.

But there is a more fundamental problem here. Even if we could design a questionnaire so cleverly as to weed out misinformation, there would remain a problem in interpreting the results. Does the number of DGUs serve as a The controversy over the frequency with which guns are used in self-defense is animated by the notion that such uses are vital and virtuous.

measure of the public benefit of private gun possession, even in principle? When it comes to DGUs, is more better? We note several problems:

- 1. Gun use may take the place of other means of avoiding trouble. Someone who has a gun handy will be inclined to use it when there is a perceived threat to person or property. But other means of defense, such as calling for help or leaving the scene, may be just as effective. Access to a firearm may encourage some people to be less prudent about avoiding confrontations and may enable or embolden others to escalate confrontations. The logic here extends to preventive activities as well. Gun possession may encourage some people to invest less in other means of self-protection or to be less vigilant in avoiding unsafe situations. The NSPOF, as with other surveys, does not provide sufficient information about what alternative courses of action were available to its respondents. Without this information, it is not possible to determine whether many of these gun uses were beneficial to society.
- 2. Readiness to use guns in self-defense may lead to fatal mistakes. Someone who keeps a gun handy for dealing with intruders and other predators may end up shooting the wrong person. We refer here

not only to the tragic cases in which someone shoots a member of their family after hearing a noise in the night, but also those cases in which the intruder is perhaps trespassing but poses no physical threat to the household.

3. The number of DGUs tells us little about the most important effects on crime of widespread gun ownership. When a large percentage of households and even people on the street are armed, that circumstance presumably has an important effect on the behavior of predatory criminals. Some may be deterred or diverted to other types of crime. Others may change their tactics, acquiring a gun themselves or in some other way seeking to preempt gun use by the intended victim (Cook 1991). Such consequences presumably have an important effect on criminal victimization rates, but are in no way reflected in the DGU count.

To sum up, surveys are a decidedly flawed method for learning about the frequency with which innocent victims of crime use a gun to defend themselves. On the other hand, even if we could develop a reliable estimate of this frequency, it would only be of marginal relevance to the ongoing debate over the appropriate regulation of firearms commerce, possession, and use.

...surveys are a decidedly flawed method for learning about the frequency with which innocent victims of crime use a gun to defend themselves.

## VII

# ATTITUDES TOWARD GUN CONTROL

"One of the few constants in American public opinion over the last two decades has been that three-fourths of the population supports gun control," wrote Tom W. Smith in 1980. Now, years later, this consistently high level of support remains. In the 1994 General Social Survey, 78 percent favored a law that would require a person to obtain a police permit before buying a gun (BJS 1995, 193). But there are limits to how far this majority has been willing to go. Registration and police background checks have long been in favor, but an outright ban on handgun ownership has been opposed by a clear majority (BJS 1995, 191). The NSPOF includes two items on attitudes toward gun-control measures, and the results conform with this general pattern.

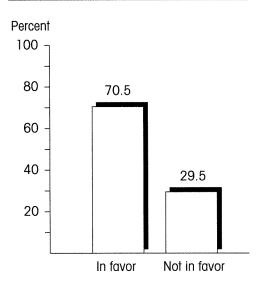
## Support for Handgun Control Measures: How Much and from Whom?

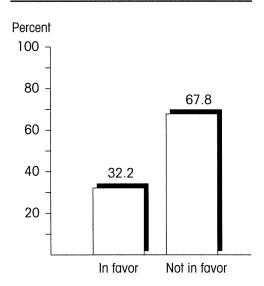
Each respondent in the NSPOF was asked the following questions: "Would you favor or oppose a law which required private citizens to register handguns they own?" "Would you favor or oppose a law which made it illegal for any private citizen, other than law enforcement officers and licensed security guards, to own a handgun?" Similar items have been included in a variety of national surveys over the years (Kleck 1991).

The Gallup Monthly Poll from time to time has asked, "Would you favor or oppose the registration of all handguns?" During the 1980s support inRegistration and police background checks have long been in favor, but an outright ban on bandgun ownership bas been opposed by a clear majority....

#### Support for Handgun Registration

#### Support for Handgun Ban





...every subgroup is solidly in support of registration, whereas no subgroup shows majority support for a bandgun ban....

creased from 66 percent (1982) to 81 percent (1990) and has remained at that high level since then. The NSPOF-based estimate is lower, with 71 percent indicating support for handgun registration.

The Gallup Poll has also included another NSPOF item, the ban on handgun ownership, for a number of years. While a majority were in favor when the question was first asked in 1959, the proportion dropped to as low as 31 percent in the mid-1970s, and has plateaued at about 40 percent since 1981 (Kleck 1991, 366, 378; BJS 1995, 191). Again the NSPOF estimate is lower than the most recent Gallup results, with just 32 percent supporting a ban.

Table 7.1 details the patterns of support for these two measures across sociodemographic groups, using NSPOF data. Overall, we see every subgroup is solidly in support of registration, whereas no subgroup shows majority support for a handgun ban (though nearly half of Hispanics favor such a ban). The patterns of support for the two policies are closely linked for several dimensions, beginning with the great sexual divide: women are more supportive of both policies then men by about 14 percentage points. Whites are less likely than African-Americans and Hispanics to favor either handgun registration or a ban. No clear pattern emerges across age groups.

## Views on Gun Control by Sociodemographic Characteristics

| Characteristic Fo               | vor Handgun Registration | Favor Handgun Ban |
|---------------------------------|--------------------------|-------------------|
|                                 | Percent                  |                   |
| Total (N=2,568)                 | 70.5                     | 32.2              |
| Sex:                            |                          |                   |
| Male (N=1,186)                  | 63.5                     | 25.2              |
| Female (N=1,382)                | 77.1                     | 38.8              |
| Race:                           |                          |                   |
| White (N=1,626)                 | 70.4                     | 30.3              |
| Black (N=430)                   | 73.9                     | 39.4              |
| Hispanic (N=407)                | 77.8                     | 46.5              |
| Age:                            |                          |                   |
| 20-24 (N=195)                   | 66.7                     | 30.0              |
| 25-34 (N=581)                   | 70.9                     | 28.5              |
| 35-49 (N=873)                   | 75.8                     | 33.8              |
| 50-64 (N=465)                   | 64.1                     | 30.3              |
| 65 plus (N=360)                 | 71.8                     | 35.9              |
| Education:                      |                          |                   |
| Less than high school (N=358)   | 74.1                     | 35.5              |
| High school (N=858)             | 65.7                     | 31.9              |
| Some college (N=731)            | 71.2                     | 23.8              |
| College degree (bachelor's) (N= | 291) 78.5                | 32.3              |
| Some post-college (N=70)        | 84.3                     | 37.2              |
| Advanced degree (N=224)         | 67.4                     | 43.3              |

Continued

Views on Gun Control by Sociodemographic Characteristics (Continued)

| Characteristic                   | Favor Handgun Registration | Favor Handgun Ban |
|----------------------------------|----------------------------|-------------------|
|                                  | Percer                     | nt                |
| Community:                       |                            |                   |
| Rural (N=446)                    | 62.6                       | 21.3              |
| Small town (N=777)               | 74.1                       | 31.5              |
| Medium city (N=421)              | 71.7                       | 33.0              |
| Suburbs (N=319)                  | 71.7                       | 34.3              |
| Large city (N=566)               | 69.8                       | 39.5              |
| Census Region:                   |                            |                   |
| Northeast (N=476)                | 77.6                       | 39.3              |
| Midwest (N=620)                  | 71.5                       | 30.1              |
| South (N=972)                    | 66.4                       | 29.4              |
| West (N=500)                     | 69.4                       | 32.5              |
| Total family income (in thousand | s):                        |                   |
| \$0-10 (N=293)                   | 70.5                       | 40.8              |
| 10-20 (N=422)                    | 75.0                       | 33.1              |
| 20-30 (N=382)                    | 69.9                       | 28.6              |
| 30-50 (N=579)                    | 68.6                       | 27.5              |
| 50-75 (N=312)                    | 66.7                       | 31.9              |
| 75 plus (N=200)                  | 74.4                       | 34.1              |

Education and income both evince a U-shaped pattern of support for a handgun ban.

Education and income both evince a U-shaped pattern of support for a handgun ban. High-school dropouts and those with postgraduate education are most supportive, while those with "some college" are least supportive. Similarly, those in the midrange of income (\$20–50,000) are least supportive, with the poor and the rich somewhat more so.

Rural communities, where the gun culture is strongest, offer less support for

either measure than residents of towns and cities. And the South and the Northeast divide over these issues in the expected way.

## Gun Involvement and Support for Handgun Control

In Table 7.2, we disaggregate respondents on the basis of their involvement with guns, beginning with their current ownership. As expected, adults who either own guns or live in a house-

# Views on Gun Control by Extent of Involvement with Guns

Favor Handgun Registration Law Favor Making Handguns Illegal for Private Citizens

|  |              | ioi i iivaio oilizoiis |  |
|--|--------------|------------------------|--|
|  | Percent      |                        |  |
| R owns gun (N=789)<br>Male (N=602)                         | 58.7<br>55.5 | 10.8<br>9.8            |  |
| Female (N=187)   | 72.2         | 15.0                   |  |
| R does not own gun (N=1,658)                               | 76.9         | 40.5                   |  |
| Male (N=525)   | 73.8         | 38.4                   |  |
| Female (N=1,133)   | 78.7         | 41.8                   |  |
| R owns gun, employed in protective service job (N=38)      | 62.7         | 29.8                   |  |
| R owns gun, not employed in protective service job (N=744) | 58.6         | 9.9                    |  |
| R does not own gun, lives in                               |              |                        |  |
| household with gun (N=396)                                 | 77.6         | 25.6                   |  |
| Male (N=60)<br>Female (N=336)                              | 80.1<br>77.0 | 32.1                   |  |
|  | 77.0         | 24.1                   |  |
| Parents kept gun in home:                                  | 00.7         | 05.7                   |  |
| Yes (N=1,454)<br>No (N=1,087)                              | 69.7<br>71.5 | 25.7                   |  |
| •  | 71.5         | 40.7                   |  |
| R hunted in last year<br>(N=258)                           | 49.7         | 9.2                    |  |
| R went sport shooting last year (N=296)                    | 49.4         | 6.7                    |  |
| R carried gun for protection last year (N=268)             | 55.9         | 8.8                    |  |
| Military service:  |              |                        |  |
| R Veteran (N=380) R Armed forces personnel                 | 57.7         | 25.0                   |  |
| on active duty (N=135)                                     | 80.8         | 21.6                   |  |
| Never in armed forces (N=2,013)                            | 72.2         | 34.0                   |  |

R = Respondent.

...over
balf of all
gun-owning
men and
nearly threequarters of
gun-owning
women
support
bandgun
registration.

hold with a gun are less likely to support either handgun control measure than other adults. Yet note that over half of all gun-owning men and nearly three-quarters of gun-owning women support handgun registration. And it is surely intriguing that 11 percent of gun owners and 26 percent of nonowners who live with an owner favor a ban on handguns. In fact, 10 percent of handgun owners favor a ban. Support for handgun registration and a handgun ban are highest among those gun owners employed in protective service occupations, though the sample size for this group is somewhat small.

How can we explain why a subset of handgun owners would actually endorse an outright ban on handguns? They may have been confused about the question. Or they may have been indicating a genuine willingness to exchange their own handgun for the chance to live in a handgun-free community.

Those respondents who are most actively involved with guns are less likely than other gun owners to support either control measure. In Table 7.2 we see the relatively low levels of support by those who hunt, go sport shooting,

or carry a gun for protection. The low level of support among veterans may reflect their active involvement with guns, as documented earlier.

# Support for Handgun Control and Concern about Crime

Do concerns about crime, or actual victimization experiences, increase or decrease a respondent's support for handgun control? Handguns are the preferred gun both for perpetrating crime and for defending against it, and in that sense restrictions on handguns cut both ways. What we actually find in the NSPOF results is an interesting difference between popular views of the two control measures.

In Table 7.3, concern about crime is related to support for the handgun control measures. In comparison to those with a more sanguine view, those who believe that crime is going up in their neighborhood are *more* likely to support handgun registration but *less* likely to support a handgun ban. This pattern may reflect a belief that registration would give an advantage to lawabiding citizens over the criminal element but that an outright ban would have the opposite effect.

# Views on Gun Control in Relation to Concerns about Crime

Favor Handgun Registration Law Favor Making Handguns Illegal for Private Citizens

|   | Percent |      |  |
|---|---------|------|--|
| Perceived trend in crime rates in neighborhood over past 12 months: |         |      |  |
| Going down (N=165)  | 63.8    | 38.0 |  |
| Staying the same (N=1,801)  | 71.0    | 31.8 |  |
| Going up (N=505)  | 69.1    | 30.1 |  |
| Robbed/attacked in past 12 months (N=145)                           | 71.7    | 33.1 |  |
| Feelings of safety while out alone in the neighborhood at night:    |         |      |  |
| Very or somewhat safe (N=1,888)                                     | 69.5    | 30.1 |  |
| Very or somewhat unsafe (N=588)                                     | 73.8    | 39.2 |  |
|   |         |      |  |

...11 percent
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26 percent of
nonowners
who live with
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favor a ban
on handguns.

## VIII

# Conclusion

The NSPOF provides uniquely detailed data on the stock of firearms in private hands, the uses and misuses of these firearms, and the recent transactions in which firearms have changed hands. These survey data are not without flaws. We have taken care to document the methods used in gathering these data and point out potential problems. The response rate is uncomfortably low, although in line with other telephone surveys of this sort. More notable for students of survey design, we find that female respondents are substantially less likely to report their husband's guns than are the male owners themselves. As a result, we limit most of our analysis to respondents' reports concerning their own guns, which appear accurate.

The most important methodological problem explored in this report is the likelihood of a large positive bias in estimates of the incidence of rare events. We have offered evidence that the NSPOF-based estimates of the number of defensive gun uses and of the number of firearm accidents are too high by an order of magnitude or more, and that many of the DGU reports contain puzzling internal contradictions or otherwise don't make sense. The problem comes down to a matter of arithmetic. If the true incidence is 1 in 1,000, say, then even a small false-positive rate among the other 999 will result in an estimate that is far too high. False positives may originate from telescoping, confusion, a desire to impress the interviewer, and other causes. This

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problem is generic to any method of measurement but has not been adequately acknowledged or dealt with in the field of survey research. Thus, one of our most important conclusions is negative: do not place faith in estimates of the number of defensive gun uses-or indeed, in any survey-based estimate of the incidence of a rare event-unless there is a credible mechanism for screening out false reports. Note that the NCVS deals with the false-positive problem by preempting it: only respondents who say they were the victim of a crime are asked about self-defense measures, so the vast majority of respondents never have a chance to offer a report, false or otherwise, on defensive gun uses.

For measuring other characteristics of gun ownership and use, we do find the NSPOF credible. Among the more notable findings:

- While there are enough guns in private hands to provide every adult with one, in fact the pattern of ownership is quite concentrated. Only a quarter of adults own a gun, and on the average owners have about four guns each. Just 10 million adults own over half of the 200 million guns.
- When asked, handgun owners usually give self-protection as their primary motive, while long gun owners mention hunting or target shooting. Other findings support this basic division: handguns are

much more likely than long guns to be kept unlocked and ready for use in the home as well as to be carried in public, but they are much less likely to be used in sporting activities. Despite this difference in purpose, the demographic and socioeconomic patterns of ownership are very similar for handguns and long guns. In fact, most handgun owners also own one or more long guns. It seems fair to conclude that the more fundamental divide among people is not with respect to their felt needs (sports or self-protection) but rather with respect to their level of comfort and experience with guns. Those who like guns, have experience with them, and have the means to buy them tend to keep a number of them for various purposes. Most of the adult public turns elsewhere for recreation and selfprotection.

Over time, the self-protection and sporting uses have been changing in relative importance in motivating gun acquisition and use. Perhaps as a result of the increasing urbanization of the United States, the overall prevalence of ownership of guns appears to be declining, as is participation in hunting. Proportionately fewer households own guns now than in the 1960s and 1970s, and the younger cohorts are entering into gun ownership at slower rates than previous cohorts. When people do acquire guns now, it is more likely

to be motivated by self-defense than in the past. The mix of new guns sold is now equally divided between handguns and long guns, whereas 25 years ago there were twice as many long guns sold (Cook 1993). The NSPOF findings suggest that about 5 percent of adults are planning to acquire a gun for self-protection even though they do not own a gun now.

- The concern for self-protection helps account for the unsafe storage methods and the widespread practice of carrying guns in public. Of particular interest is the fact that those owners who have received formal firearms training are no less likely than others to store their guns unsafely, unlocked and loaded.
- We find that 60 to 70 percent of all firearm acquisitions involve a fed-

erally-licensed firearm dealer, a figure that is higher than previously thought. The remaining gun transactions are of special concern because they are less subject to regulatory scrutiny.

These and a number of other findings serve as a useful reference for those who wish to understand the current roles played by guns in the day-to-day life of America's households, and to ascertain some of the trends. The data may also be useful in judging the impact of proposed changes in how government regulates gun transactions and use. Our extraordinary collective involvement with guns reflects and has a large influence on life-and-death matters, including crime, suicide, and accidents. Data of the sort collected by the NSPOF provide a basis for informed action in this area of public concern.

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